89-122

Supreme Court, U.S.
FILED
JUL 21 1989
JOSEPH F. SPANIOL, JR.
CLERK

No. 89— _____

In The

Supreme Court of the United States

October Term, 1989

Warrior & Gulf Navigation Company, ~~et al.~~,
Petitioners

v.

United States of America,
Respondent.

PETITION FOR WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE ELEVENTH CIRCUIT

Broox G. Holmes*
Donald C. Radcliff
Armbrecht, Jackson, DeMouy,
Crowe, Holmes & Reeves
P.O. Box 290
Mobile, Alabama 36601
(205) 432-6751

Counsel for Petitioner
Warrior & Gulf Navigation Company

*Counsel of Record

QUESTIONS PRESENTED FOR REVIEW

1. Whether the Court of Appeals made an independent (and unfounded) determination of the facts in violation of Rule 52(a) of the Federal Rules of Civil Procedure and improperly substituted its opinion for that of the District Court, the fact finder in this case.

2. Whether the Court of Appeals erred in applying outdated state law principles to a maritime claim with respect to a claimed Act of God defense thereby creating an egregious inconsistency among the Circuit Courts.

LIST OF PARTIES AND RULE 28.1 LIST

The parties to the proceedings below were the following:

Warrior & Gulf Navigation Company;
Parker Towing Company;
Southern Natural Gas Company;
Hunt Oil Company;
Insurance Company of North America; and
United States of America, acting by and through the United States Army Corps of Engineers.

The respondent before this Court is the United States of America.

Petitioner Warrior & Gulf Navigation Company is owned by Transtar, Inc. Subsidiaries and affiliates of Petitioner are as follows:

Southern International Service Company;
Great Lakes Fleet;
Duluth, Missabe Iron Range Railway Company;
Elgin, Joliet and Easton Railway Company;
Bessemer and Lake Erie Railroad Company;
Union Railroad Company;
The Pittsburgh and Conneaut Dock Company;
Laurel Trucking;
Tracks Traffic Management Services, Inc.;
Birmingham Southern Railroad Company;
Fairfield Southern Company, Inc.;
Lake Terminal Railroad Company; and
McKeesport Connecting Railroad Company.

TABLE OF CONTENTS

	PAGE
QUESTIONS PRESENTED	i
LIST OF PARTIES AND RULE 28.1 LIST	ii
TABLE OF AUTHORITIES	iv
OPINIONS BELOW	1
JURISDICTION	2
STATEMENT OF THE CASE	2
A. Statement of Facts	2
B. Course of Proceedings and Disposition in the Court Below	7
REASONS FOR GRANTING THE WRIT	9
A. The Court of Appeals violated Rule 52(a)	9
B. The Court of Appeals erroneously applied state law to an issue of maritime law	18
CONCLUSION	24

TABLE OF AUTHORITIES

Cases: PAGE

Amadeo v. Zant, 486 U.S. 214 (1988) 13, 17

Anderson v. Bessemer City, 470 U.S. 564 (1985) ... 17

Bradford v. Stanley, 355 So.2d 328 (Ala. 1978) 18

Byrd v. Byrd, 657 F.2d 615 (4th Cir. 1981) 23

City of Jackson v. Brummett, 80 So.2d 827 (Miss. 1955) 19

Fireman's Fund Ins. Companies v. M/V VIGNES, 794 F.2d 1552 (11th Cir. 1986) 11

Floyd v. Lykes Bros. Steamship Co., Inc., 844 F.2d 1004 (3rd Cir. 1988) 23

Garrett v. Moore-McCormick Co., Inc., 317 U.S. 239 (1942) 23

Glisson v. City of Mobile, 505 So.2d 315 (Ala. 1987) 18

Grover-Ferguson Co. v. A/S Ivarans Rederi, 171 F.Supp. 766 (E.D.Pa. 1959) 20

Gulf Red Cedar Co. v. Walker, 31 So. 374 (Ala. 1902) 18

Hasbro Industries, Inc. v. M/V ST. CONSTANTINE, 705 F.2d 339 (9th Cir. 1983) 11

Hill Air of Gadsden, Inc. v. Marshall, 526 So.2d 15 (Ala. 1988) 12, 19

In re Marine Leasing Services, Inc., 471 F.2d 255 (5th Cir. 1973) 20

James River Parishes Co., 686 F.2d 1129 (5th Cir. 1982) 20

J. Ray McDermott & Co., Inc. v. The Vessel Morning Star, 457 F.2d 815 (5th Cir. 1972) 23

Kermarec v. Compagnie Generale Transatlantique, 358 U.S. 625 (1959) 22

Lavendar v. Kurn, 327 U.S. 645 (1946) 13

Marcona Corp. v. Oil Screw Shifty III, 615 F.2d 206 (5th Cir. 1980) 11

Moragne v. States Marine Lines, Inc., 398 U.S. 375 (1970) 22
Petition of C. Zubic & Sons, 1966 A.M.C. 1753 (W.D.Pa. 1966) 20
Pope & Tablot, Inc. v. Hawn, 346 U.S. 406 (1953) .. 23
Pullman-Standard v. Swint, 456 U.S. 273 (1982) ... 17
Socony Mobile Oil Co. v. Texas Coastal & International, Inc., 559 F.2d 1008 (5th Cir. 1977) 11
Southern Pacific Co. v. Jensen, 244 U.S. 205 (1917) 22
St. Hilarie Moye v. Henderson, 496 F.2d 973 (8th Cir. 1974) 22
The LOTTAWANNA, 88 U.S. (21 Wall.) 58 (1874) .. 22
The Louisiana, 70 U.S. (3 Wall.) 164 (1865) 20
U.S. v. Paducah Towing Co., 692 F.2d 412 (6th Cir. 1982) 12, 20

Statutes and Authorities:

28 U.S.C. §1254(1) 2
28 U.S.C. §1333 8
46 U.S.C. §741 8
33 U.S.C. §401 8
Rule 52 *Federal Rules of Civil Procedure* 9, 12, 13, 16, 17, 24
Gilmore & Black, The Law of Admiralty, §3-33 (2d Ed. 1975) 20

No. 89-_____

In The

Supreme Court of the United States

October Term, 1989

Warrior & Gulf Navigation Company, et al.,
Petitioners

v.

United States of America,
Respondent.

PETITION FOR WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE ELEVENTH CIRCUIT

Petitioner Warrior & Gulf Navigation Company (WGN) respectfully prays that a writ of certiorari issue to review the judgment and opinion of the United States Court of Appeals for the Eleventh Circuit, entered in the above entitled proceeding on April 25, 1989.

OPINIONS BELOW

The opinion of the Court of Appeals for the Eleventh Circuit is reported at 864 F.2d 1550 and is reprinted as Appendix A hereto. The order denying WGN's Petition for Rehearing is reported at 875 F.2d 874 and is reprinted as Appendix B hereto. The memorandum opinion of the United States District Court for the Southern District of Alabama (Thomas, S.D.J.) has not been reported. It is reprinted as Appendix C hereto.

JURISDICTION

The judgment of the United States Court of Appeals for the Eleventh Circuit was entered on February 6, 1989. Petitions for Rehearing were denied by the United States Court of Appeals for the Eleventh Circuit on April 25, 1989. The jurisdiction of this Court to review the judgment in question by writ of certiorari is invoked under 28 U.S.C. §1254(1).

STATEMENT OF THE CASE

A. Statement of Facts

At 2:30 a.m. on December 3, 1983, the WGN vessel M/V CADDO pushing six coal hopper barges struck the Highway 82 Bypass Bridge on the Black Warrior River near Tuscaloosa, Alabama. The six barges broke loose and washed downriver. Both the district court (C.L. 6)[1] and Court of Appeals (864 F.2d at 1553) recognized that the catastrophic property losses suffered by the WGN and other parties to this case resulted from the domino effect of this allision. The central question presented by this petition is whether there was credible evidence before the district court to support its factual findings and legal conclusions (see Appendix C) that the Corps of Engineers was guilty of negligence proximately causing the CADDO's accident and the resulting losses.

Bankhead, Holt and Oliver Locks & Dams were constructed on the Black Warrior River between

---

[1] References to the findings of fact and conclusions of law from the District Court memorandum opinion are cited as "F.F. ___" and "C.L. ___". The memorandum opinion is reprinted as Appendix C hereto.

Birmingham and Tuscaloosa, Alabama pursuant to the Rivers & Harbors Act of 1909. Bankhead is located 23 miles northeast of Tuscaloosa. Holt is located 18.3 river miles below Bankhead and Oliver is located in downtown Tuscaloosa, nine miles below Holt. Bankhead and Holt have a spillway of vertical lift gates to control the amount of water discharged through the crest gates. Both Bankhead and Holt were designed and constructed with capabilities to accommodate and control river waters in excess of the flood or "unprecedented rain" of December 2-3, 1983. R.4 - 610, 618, 622, 638; WGN Ex. 6, 7, 10 & 11.[2]

In addition to spillways, Bankhead and Holt have lock chambers for the navigation of commercial and recreational vessels on the river system. The lock tenders on duty at Bankhead and Holt have three primary responsibilities; operation of the crest gates, lockage of vessels through the project and routine maintenance. A lock tender's duties relative to monitoring and opening the crest gates to maintain the required river level above each project take precedence over any duties of locking vessels or routine maintenance. Only after the upper pools at Bankhead and Holt are brought under control by raising the crest gates is the lock tender to lock a vessel through the lock. WGN Ex. 6 ¶ 2-1.1; WGN Ex. 11 ¶ 27.

Bankhead and Holt are run-of-the-river projects designed to be operated during periods of a rising river as

---

[2] References to the record in the district court will be cited as "R.___". References to the exhibits in the trial in the district court will be cited by the offering party's name, *e.g.*, "WGN Ex. ___". The trial transcript and exhibits have been certified by the district court and transmitted to this Court for use by the Court in deciding whether to grant the petition for certiorari.

if they did not exist. R5-1074-75, 1078. This means once the river level above the dam rises higher than the desired level to maintain a navigable channel nine feet in depth, the dam tenders are required by the Corps' operating manuals to open the crest gates across the river in a specific sequential and incremental order until the water level has subsided to the desired height. In this manner, run-of-the-river projects are designed to permit water to pass through the gates uninterrupted (F.F.26). Run-of-the-river projects are not operated properly if, due to the failure of the lock tender to lift the crest gates in a timely fashion, the water above the dam is allowed to impound and is then discharged through the crest gates at a faster rate than the water would have flowed had the dam not been constructed. R4-617-618. Such improper operation can cause a damaging flood wave and create a hazard to downriver traffic. The Corps' own regulation (WGN Ex. 15, quoted in F.F. 27) warns against the creation of such a flood wave. As that regulation explains, "[t]he operation of gated spillways because of sudden increase in the *rate* of outflow may result in a *damaging flood wave* " (emphasis added). The overwhelming evidence at trial was that this is exactly what happened on December 2-3, 1983 - the Corps' lock tenders caused or allowed a flood wave which caused the extensive damage to WGN (F.F. 42-44).

Because any substantial lifting of the crest gates across the Bankhead and Holt Dam has an immediate and direct effect on the current of the river below the project, the lock tenders are trained by their supervisors, the Corps area engineers and lock superintendents, to warn downstream marine traffic and locks and dams of significant gate movements. These warnings are to be broadcast over the project's marine radio on a designated

frequency which the marine traffic is required by law to monitor. R3-347-49, 360, 363, 527, 532.

During the 12 hour period beginning at 7:30 p.m. on December 2, 1983, the northeast portion of Alabama near Birmingham experienced a large amount of rainfall. According to the official Corps of Engineers records, the area north of Bankhead received 10.3 inches of rain in that 12 hour period [U.S. Ex. 2(c)]. Only three inches of rain accumulated at Holt and the Oliver rain gauge registered slightly over two inches of rain during that period of time. R4-624-25.

The lock tenders at Bankhead admitted at trial that they knew as early as 11:00 p.m. on December 2, 1983, that there would be a "runaway river" which would require all Bankhead crest gates to be raised completely out of the water. R5-926-27. Notwithstanding this advance knowledge that the crest gates were going to be raised higher than ever before at Bankhead, the Bankhead tenders failed to warn the river traffic between Bankhead and Holt and the dam tender at Holt to prepare (by gradually opening gates per the Corps' mandatory schedule) for a large influx of water into the river system with the consequent increase in river current and velocity (F.F 41).

At the time the Bankhead tenders knew that they were facing a runaway river and were in the process of lifting Bankhead gates completely out of the water, three WGN tugboats, the CADDO, APALACHEE and MUSKOGEE, were in the river system immediately above Holt waiting to be locked through the Holt facility. As the navigation chart of the river reflects (U.S. Ex. 1), the 18 mile stretch of river between Bankhead and Holt, commonly referred to as Holt Lake, is much wider than

the river downstream between Holt and Oliver and as such is less affected by a rapid rise in the river than the narrow, straight stretch below Holt (F.F. 10). As the river chart also reflects, there are numerous tributaries and arms in Holt Lake where these three tugboats could have found a safe haven until river conditions settled had Bankhead simply warned the WGN tugboats of the runaway river headed south. Instead, the Holt lock tender (also not informed of the Bankhead gate openings) locked the three tugboats and tow through the Holt facility thereby placing the boats in a much more dangerous stretch of river below Holt than the relatively safe haven above (F.F. 43).

Only after the Holt tender completed the locking operations for the last WGN towboat, the CADDO, did the tender learn that the river above Holt had risen at an alarming rate from 12:15 until 1:40 a.m. during which period he had failed to raise a single crest gate (see WGN Ex. 13, reprinted as Appendix D hereto). The Holt tender then began opening gates at 1:40 a.m. as fast as possible in clear violation of the Corps' mandatory Gate Operating Schedule (Compare WGN Ex. 11, p. B-11, ¶ 27 to WGN Ex. 13). The Holt tender also failed to issue the critical warnings over his marine radio to the tugs and tow in the direct path of the tremendous volume of water he discharged through the crest gates. The Holt tender's improper gate operations caused the river level below Holt to jump up *10.2 feet in just 40 minutes*, which doubled the volume of water being released downriver just prior to 1:40 a.m. (F.F. 43) and created the hazardous flood wave the Corps' manual predicted would result from improper gate openings (WGN Ex. 15). This unexpected flood wave caused the operator of the CADDO to lose control of his six barge flotilla and strike

the Highway 82 Bypass Bridge six miles below Holt (F.F. 46).

All the tugboat operators testifying at trial stated that they rely upon the lock tenders to broadcast warnings of significant gate movements and that no such warnings were given by either Bankhead or Holt during the critical period between 11:00 p.m. on December 2 and 2:30 a.m. on December 3, 1983. R2-64, 146, 148, 184, 189, R3-414-15, 437, R4-871, 910. Those mariners and Dr. Neil Grigg, an expert hydrologist whose opinions are discussed in more detail below, also testified without equivocation that the unexpected surge in the river current below Holt, caused by the unannounced gate lifting operations at Holt, was the sole and direct cause of the damages suffered by WGN and others. R2-64, 146, 148, 184, 189, R3-414-15, 437, R4-871, 910.

B. Course of Proceedings and Disposition in the Court Below

WGN, Parker Towing Company ("Parker"), Southern Natural Gas Company ("Sonat"), Hunt Oil Company and its underwriter, Insurance Company of North America (collectively "Hunt") filed lawsuits in the United States District Court for the Southern District of Alabama, Southern Division, against the United States of America acting by and through the U.S. Army Corps of Engineers to recover their losses caused by the negligence of the Corps in the operation of Bankhead and Holt Locks and Dams and in failing to properly man the locks and train the lock operators. Sonat, Hunt and Parker also asserted claims against WGN, alleging WGN to be guilty of negligence contributing to their losses. The United States filed a claim against Parker for damages to one of the locks on the river which was struck

by a Parker barge. The district court had subject matter jurisdiction over these maritime claims under 28 U.S.C. §1333, 46 U.S.C. §741 *et seq* and 33 U.S.C §401 *et seq.*

These claims were consolidated and subsequently tried on liability only before the Honorable Daniel H. Thomas sitting without a jury during the period of September 15-24, 1986. By Order dated May 18, 1987, District Judge Thomas rendered a 41 page opinion concluding that the Corps of Engineers was guilty of negligence which proximately caused the damages suffered by the private litigants (Appendix C). In particular and along with other findings of specific facts and acts of negligence committed by the Corps combining to cause the catastrophic damages, the district court found that the lock tenders at Bankhead and Holt were negligent in failing to issue the required warnings of gate liftings, that the Holt tender was negligent in allowing the water above Holt to impound, and that the operator released the stored water at hazardous rates which created an unexpected surge in the river below Holt. The United States' attempt to avoid liability by blaming the losses on an Act of God in the form of "unprecedented rainfall" was considered and rejected by the district court (C.L. 11). The district court also concluded WGN was not guilty of any actionable negligence which caused or contributed to either WGN's own damages or the losses of the other parties (C.L. 6-7).

The Court of Appeals reversed the district court, concluding that the losses were caused solely by an Act of God and that any negligence by the Corps of Engineers did not cause or contribute to those losses. In ruling that the district court was clearly erroneous, the Court of Appeals invoked questionable Alabama law which was interpreted by the Court of Appeals to permit a party to

escape liability under the doctrine of Act of God even though that party was guilty of negligence. (864 F.2d at 1553).

Petitions for Rehearing were filed by WGN, Parker, Sonat and Hunt. The Court of Appeals denied those petitions on April 25, 1989 (875 F.2d 874).

REASONS FOR GRANTING THE WRIT

A. The Court of Appeals violated Rule 52(a)

1. The District Court's Findings and Opinions Were Not Clearly Erroneous.

The 41 page memorandum opinion of the district court was fully supported by the evidence at trial, consisting of almost two weeks of non-jury trial testimony and hundreds of pages of exhibits. Most of the evidence against the Corps came from the Corps' own witnesses and documents, as the transcript and exhibits reflect.

The operation and maintenance manuals for Bankhead and Holt set forth detailed instructions on the safe and proper method of opening the crest gates. The Forewords of both manuals warn that the failure to properly operate the crest gates during flood stages "can result in losses in property and possibly to human life and may have a harmful effect on the river traffic." (WGN Exs. 6 and 10). The lock tenders were also trained by their supervisors to broadcast any substantial gate lifting operations on the marine radio in order to warn downriver marine traffic to expect a rise in the river level and a sudden increase in the velocity of the current. R3-347-49, 360, 363, 527, 532. The testimony from a large

number of Corps' employees and towboat operators on the Black Warrior River during that night and early morning proved conclusively that the lock tenders failed to follow the Corps regulations on the proper operation of the crest gates during flood stages and failed to issue the critical warnings over the marine radio. R2-64, 146, 148, 184, 189, R3-414-15, 437, R4-871, 910, R5-935, R6-1314.

The district court heard, and accepted as credible, the testimony of several tugboat operators on the river below Holt when the Holt tender doubled the volume of water being discharged through the Holt crest gates in just 40 minutes. Those witnesses described in detail what this unexpected surge did to the navigability and safety of the river below Holt as the flood wave travelled south from Holt. The pilot of the CADDO said that the surge caused him to hit the Highway bridge. R2-127. A Parker tug captain waiting just below Oliver Lock & Dam to lock northbound testified that before 2:30 a.m. on December 3, 1983 the river was navigable but after 2:30 the river was uncontrollable as far as attempting to navigate on it. R2-188. This was just after the Corps improperly released the tremendous volume of water from Holt. A WGN tug captain, also just below Oliver, testified that the river suddenly changed into a "raging river" around 2:30 that morning. R3-428. A disinterested captain for a company not a party to the lawsuit, who was at the wheel of a tugboat approximately one mile below Oliver, testified that shortly after 2:30 a.m., the current increased to 12 to 14 miles per hour and caused the river to look like "white water". R4-893. That witness testified that he had never seen any river rise as rapidly as the Black Warrior River did between 2:30 and 3:30 a.m. R4-892.

All of this testimony at trial convinced the district court that the Act of God (rain) would not have produced

the damage if the Corps had handled the water properly by timely raising the crest gates and by warning the mariners of their gate lifting operations. In light of the evidence at trial in support of the district court's ruling, the Court of Appeals should have affirmed. As stated in *Fireman's Fund Ins. Companies v. M/V VIGNES*, 794 F.2d 1552, 1555 (11th Cir. 1986):

> Questions of due diligence and proximate cause are fact questions, and the District Court's findings on these issues will not be overturned on review unless clearly erroneous. *Marcona Corp. v. Oil Screw Shifty III*, 615 F.2d 206, 208 (5th Cir. 1980) (proximate cause); *Socony Mobile Oil Co. v. Texas Coastal & International, Inc.*, 559 F.2d 1008, 1010 (5th Cir. 1977) (due diligence); *see also Hasbro Industries, Inc. v. M/V ST. CONSTANTINE*, 705 F.2d 339, 341 (9th Cir. 1983) ('due diligence is essentially a negligence concept and... determinations of negligence in admiralty cases are findings of fact which will be given application unless clearly erroneous'), *cert. denied*, 464 U.S. 1013, 104 S.Ct. 537, 78L.Ed.2d 717.

In short, the findings and opinion of the district court were not and cannot be held clearly erroneous. The opinion is fully supported by the trial testimony and exhibits introduced into evidence at trial. The Court of Appeals' reversal should not be allowed to stand.

2. The Court of Appeals' Use of Outdated State Law is Erroneous.

The ruling of the Court of Appeals that the losses suffered by WGN were caused by an Act of God for which the United States has no responsibility rests on the

Court's rejection of the district court's well founded findings of fact. The Court of Appeals did *not* reverse or even question the district court's detailed findings of Corps' negligence or the facts on which that negligence was based. Instead, the Court of Appeals looked to Alabama law which it interpreted as allowing a negligent party to prevail on an Act of God defense. 864 F.2d at 1553. More recent Alabama law, however, does not allow a negligent party to escape liability on an Act of God defense. *Hill Air of Gadsden, Inc. v. Marshall*, 526 So. 2d 15 (Ala. 1988). In the *Marshall* case, the Alabama Supreme Court held that if a storm could have been anticipated, the Act of God defense is not available. That Court refused to overturn a jury verdict against the negligent defendant who asserted an Act of God defense. Thus, the cases relied on by the Court of Appeals are not even accurate propositions of state law.

Moreover, as discussed below, maritime law which the Court of Appeals should have applied to the Corps' Act of God defense is not so forgiving as the outdated state law relied on by the Court of Appeals. Under maritime law, *any* negligence by the defendant precludes a successful Act of God defense. *E.g. U.S. v. Paducah Towing Co.*, 692 F.2d 412 (6th Cir. 1982).

Because the district court based its rejection of the Act of God defense raised by the Corps on credible evidence applying the correct legal standard (admiralty law), the reversal by the Court of Appeals on that factual issue violates Rule 52.

3. Rule 52 Precludes the Court of Appeals from Substituting its Opinion for that of the District Court.

Obviously disagreeing with the district court's conclusion that the Corps of Engineers was legally responsible for its acts of negligence, the Court of Appeals declared that a mistake had been made by the district court and excused the United States from responsibility for its negligent actions. The Court of Appeals misconstrued the correct focus of appellate review in its analysis of the issues before it. The initial inquiry should have been whether there was credible and sufficient evidence to support the findings of the district court. If there was such evidence (and there was), it makes no difference whether the appellate panel interpreted some of the evidence differently or placed more emphasis on certain testimony than did the district court. *Lavender v. Kurn,* 327 U.S. 645 (1946).

Because the view of the evidence accepted by the district court was supported by substantial credible evidence, those findings cannot be "clearly erroneous". *Amadeo v. Zant,* 486 U.S. 214 (1988) ("We frequently have emphasized that 'where there are two permissible views of the evidence, the factfinder's choice between them *cannot* be clearly erroneous'") (emphasis added). This cardinal rule of appellate review is not subject to any exceptions. Thus, the Court of Appeals cannot choose to ignore Rule 52 by suggesting a "mistake" was made by the district court judge. In so doing, the Court of Appeals unquestionably substituted its opinion for that of the district court and failed to give due deference to the district court in its factual findings.

In the case at bar, there were two views of the evidence for the district court to consider. The Corps blamed the rainfall. The remaining parties blamed human error in preparing for and coping with the rain experienced during the critical period of time from 11:00 p.m. on

December 2, 1983 (when Bankhead foresaw a runaway river) to 2:30 a.m. on December 3, 1983 (when the CADDO's tow struck the highway bridge).

In addition to the damaging admissions at trial of various Corps' personnel and evidence of violations of their own rules and regulations, evidence of Corps' negligence and causation was introduced at trial by the expert testimony of Dr. Neil Grigg. Dr. Grigg's qualifications and expertise were so outstanding that the United States stipulated to his qualifications. R3-582. Dr. Grigg, a professor of Civil Engineering at Colorado State University, has written and co-authored some 150 publications on water hydrology and hydraulics. R3-582-83. He testified that if the dam tenders at Bankhead and Holt had followed the instructions in the applicable operation and maintenance manuals and had followed the Gate Operating Schedules designed for those projects, the dams could have been operated as run-of-the-river projects should be. R4-610. Had the lock tender at Bankhead started opening the gates earlier than 10:15 p.m. when he was already experiencing a "runaway river", he could have opened the gates gradually which would have eliminated the need to open the gates completely out of the water and would have minimized the effect of that discharge on Holt. R4-610, 622. Had the Holt lock tender gradually opened Holt's gates from 12:15 to 1:40 a.m. on December 3, 1983, as the regulations required, he would not have had to raise those gates as fast and high as he did after 1:40 a.m. R4-618, 638.

Dr. Grigg also testified that in his opinion the tremendous volume of discharge through the crest gates at Holt from 1:40 until 2:20 a.m. on December 3, 1983, drastically increased the velocity of the current in the river below Holt. R4-655, 659. Dr. Grigg prepared a time

and distance study using data from Corps records of the Holt gate openings (WGN Ex. 30, 32). The Grigg study confirmed the testimony of the CADDO Pilot Sanderson that this additional water and increased current overtook the CADDO as that tugboat was in the final approach to navigate through the Highway 82 Bypass Bridge. R4-655. Given the forces created by this discharge, Dr. Grigg concluded that the CADDO pilot was helpless to control the tug and tow when this unexpected rush of water overtook the flotilla. R4-662.

Without question the evidence at trial of the Corps' negligence and of causation was overwhelming and the district court was not clearly erroneous as the Court of Appeals concluded.

4. The Court of Appeals Misconstrued the Facts in its *De Novo* Review.

The Court of Appeals failed to address the uncontroverted failures by the Corps' lock tenders to warn downstream marine traffic of the gate openings at Bankhead and Holt, and, to make matters worse, relied upon several contentions by the United States which are misrepresentations of the facts and are not supported by any evidence. For example, the panel accepted the government's misleading argument that 10.03 inches of rain fell in the river system *between* Bankhead and Holt (864 F.2d at 1552). However, as the Corps' own exhibit [U.S. Ex. 2(c)] shows, that 10.03 rainfall occurred *above* Bankhead not below it. The significance is that the appellate argument by the United States which the Court of Appeals apparently accepted was that the high water at Holt was from the rainfall and not from the improper Bankhead operations. However, the evidence at trial was

that Bankhead's unannounced gate openings created the unexpected rise in Holt Lake (F.F. 38-40).

The Court of Appeals also accepted the unsupported assertion by the United States that Holt did not improperly impound the rising river above Holt and release it in violation of Corps' manuals (864 F.2d at 1554). Contrary to the United States argument and the Court of Appeals finding, the Corps' own gate openings record at Holt (reprinted as Appendix D) shows that the river level immediately above the Holt lock rose only 1.1 feet from 1:40 to 2:20 a.m. but that the tailwater immediately below Holt dam rose 10.2 feet during that same period. Thus, from 1:40 to 2:20 a.m., Holt was discharging impounded water *ten times as fast* as the water above Holt was rising. Unquestionably, Holt impounded then discharged the impounded water in tremendous quantities and at reckless rates in violation of the Corps' manual. R4-617-18.

The Court of Appeals, contrary to Rule 52, accepted the United States' factual misrepresentations as true and improperly rejected ~~the subst~~antial evidence considered by the district court. The Court of Appeals improperly reversed the district court as being clearly erroneous. In so doing, the Court of Appeals ignored much of the undisputed evidence relied upon by the district court and substituted its opinion for that of the trial court.

Although the Court of Appeals purported to rule within the confines of Rule 52(a) of the Federal Rules of Civil Procedure, that Court in reality failed to abide by the strictures of Rule 52(a) in rejecting the district court's findings of fact which were fully supported by the record. The Court of Appeals then improperly substituted its findings of fact (that the damages were the sole cause of

an Act of God) which at best had little support from the record. Unless this Court reverses the holding of the Court of Appeals, appellate courts may freely make a mockery of Rule 52 by premising their rulings as being founded upon a "firm conviction that a mistake has been committed." 864 F.2d at 1553.

On at least two occasions, this Court has criticized the United States Court of Appeals for the Eleventh Circuit for going beyond the confines of Rule 52 by improperly substituting its independent opinion for that of the trial court. In *Pullman-Standard v. Swint*, 456 U.S. 273, 291 (1982) this Court concluded that a reversal by the Court of Appeals was "the product of the court's independent consideration of the totality of the circumstances it found in the record" and therefore improper. More recently, in *Amadeo v. Zant*, 486 U.S. 214 (1988), this Court again reversed the Court of Appeals for doing precisely what it has done in the case at bar, stating:

> We have stressed that the clearly erroneous standard of review is a deferential one, explaining that '[i]f the district court's account of the evidence is plausible in light of the record viewed in its entirety, the court of appeals may not reverse it even though convinced that had it been sitting as the trier of fact, it would have weighed the evidence differently.' *Anderson v. Bessemer City, supra,* at 573-574, 84 L.Ed. 2d 518, 105 S.Ct. 1504. After considering the 'record viewed in its entirety' in the instant case, we conclude that the Court of Appeals failed to properly apply this standard.

The United States Court of Appeals for the Eleventh Circuit has again disregarded the mandate of Rule 52. Here, the Court of Appeals summarily erases in excess of

1500 pages of trial testimony considered by the district court in eight days of trial as well as hundreds of pages of trial exhibits, saying only it was convinced the district courts' 41 page memorandum opinion was a mistake (864 F.2d at 1553). The Court of Appeals simply substituted its opinion of the evidence for the opinion of the trier of the facts. The Court of Appeals improperly became the trier of the facts and weighed the evidence differently.

B. The Court of Appeals erroneously applied state law to an issue of maritime law.

Although the Court of Appeals noted in the first sentence of its opinion that the controversy was a "maritime tort case" (864 F.2d at 1551), the memorandum opinion of the district court was reversed by the Court of Appeals on the basis of three Supreme Court of Alabama decisions on the state law concept of the Act of God affirmative defense. 864 F.2d at 1553. Specifically, the Court of Appeals analyzed what it considered to be the crux of the case as follows:

> The act of God principle "applies only to events in nature so extraordinary that the history of climatic variations and other conditions in the particular locality affords no reasonable warning of them."[6] A party may be deemed negligent yet still be exonerated from liability if the act of God would have produced the same damage irrespective of the party's negligence. In that case, the party's negligence would not be deemed the proximate cause of the injury.[7]

---

[6] *Bradford v. Stanley*, 355 So.2d 328, 330 (Ala. 1978) (citing *Gulf Red Cedar Co. v. Walker*, 132 Ala. 553, 31 So. 374 (1902)

[7] *Glisson v. City of Mobile*, 505 So.2d 315, 319 (Ala. 1987).

The Court of Appeals then applied the above-quoted common law to this admiralty case, set aside the district court's factual findings and legal conclusions and substituted its own opinion for that of the district court. As the three state court cases relied upon by the Court of Appeals reflect, the Act of God defense under that line of cases may be invoked by an admittedly negligent tortfeasor as long as that negligence was not the main cause of the injury or injuries. However, more recent Alabama law does not permit negligent tortfeasors to avoid liability under the Act of God defense. In *Hill Air of Gadsden, Inc. v. Marshall,* 526 So.2d 15 (Ala. 1988) the Alabama Supreme Court ruled that "an act which may be prevented by the exercising of ordinary care is not an Act of God which would immunize a tortfeasor from liability." The Court then quoted with approval from a 1955 Mississippi Supreme Court decision as follows:

> No one is liable for an injury proximately caused by an act of God, which is an injury due directly and exclusively to natural causes without human intervention, and which could not have been prevented by the exercise of reasonable care and foresight. But an act which may be prevented by the exercise of ordinary care is not an act of God which would immunize a tort-feasor from liability.
>
> *City of Jackson v. Brummett, 224 Miss. 501, 80 So.2d 827, 829 (1955).*

Not only did the Court of Appeals erroneously apply state law to a maritime claim but it applied erroneous, outdated law as well.

Under admiralty law, an Act of God is defined as an event causing a casualty without human interference

and which skill and precaution by the defendant could not have been prevented. *The Louisiana,* 70 U.S. (3 Wall.) 164 (1865); *In re Marine Leasing Services, Inc.,* 471 F.2d 255, 256-57 (5th Cir. 1973). *Any interference or negligence* by the defendant will defeat this defense. *U.S. v. Paducah Towing Co., Inc.,* 692 F.2d 412, 422-23 (6th Cir. 1982); *Gilmore & Black, The Law of Admiralty,* §3-33 (2d Ed. 1975). The burden of proof in maritime cases to sustain a defense of Act of God requires "*no* intervening act of negligence on the part of the alleged tortfeasor, or [it] must be established that the events were the result of inevitable circumstances which human effort, precaution and display of nautical skill could not have been prevented." *Petition of C. Zubic & Sons,* 1966 A.M.C. 1753, 1753-54 (W.D.Pa. 1966). *See e.g. James River Parishes Co.,* 686 F.2d 1129 (5th Cir. 1982); *Grover - Ferguson Co. v. A/S Ivarans Rederi,* 171 F. Supp. 766, 767 (E.D.Pa. 1959) ("Stockard contends that the damage was caused by an Act of God, which of itself would be a complete defense. *However, if the damage results from the concurrence of defendant's negligence with an Act of God and the damage would not have occurred in the absence of such negligence, then the defendant would be liable.")* If a party's own negligence placed it in a hazardous position, the defense is unavailable even if no corrective action could then be taken to avoid the losses. *See U.S. v. Paducah Towing Co.,* 692 F.2d 412 (6th Cir. 1982) and the cases cited therein.

Had the Court of Appeals properly analyzed the legal issues relative to the United States' assertion of Act of God (or looked to the most recent state law decisions), that Court would have been compelled to reach the same conclusion as the district court for the following primary reasons.

First, the undisputed evidence proved that the high water conditions were foreseeable. More specifically, at 11:00 p.m. on December 2, 1983, the lock tender on duty at Bankhead admitted that he knew he was experiencing a "runaway river" which would require lifting all crest gates across the Bankhead dam completely out of the water, a drastic measure never required before. Had that lock tender merely warned the WGN tugboats waiting to be locked through Holt of the high water headed south, this catastrophe would have been avoided. Had the Bankhead tender alerted downriver traffic and Holt Lock as his training and the statutory regulations and operating manuals mandated, the mariners and the lock tender would have had ample time to prepare for the tremendous volume of water being discharged into Holt Lake at Bankhead.

Second, had the Holt lock tender opened the crest gates as the Holt Lake continued to rise from 12:15 a.m. to 1:40 a.m. (when the Holt tender did not open a single gate [Appendix D]), the water would not have been impounded and then released creating the devastating flood wave.

Third, had the Holt tender warned the known marine traffic between Holt and Oliver that he was lifting the crest grates from 1:40 a.m. on as fast as possible the operator of the CADDO would have expected and prepared for the surge in the current and rise in the river level headed his way.

In short, there was compelling evidence *before the trier of the facts* that the damage was caused by acts and omissions of negligence. Clearly, these undisputed facts prove that the effects of this "unprecedented rain" (most

of which occurred after the CADDO allision) were foreseeable and could have been avoided had the Corps followed its own rules and regulations. The Corps' own negligence created or at the very least made much worse the hazardous condition in which the Holt lock tender found himself at 1:40 a.m. These negligent acts and omissions proved at trial and accepted by the district court foreclose the United States from prevailing on any Act of God defense, as the district court correctly concluded.

By resorting to state law, the United States Court of Appeals for the Eleventh Circuit creates a conflict with many decisions of this Court, earlier decisions in the Eleventh Circuit on the same issue of law and numerous decisions in other circuits. Without question, the Court of Appeals for the Eleventh Circuit stands alone in insulating a negligent party from its actions by ignoring the heavy burden imposed by maritime law upon the party asserting an Act of God defense.

It has been repeatedly recognized by this Court that maritime law throughout the country must be harmonious and uniform. *Moragne v. States Marine Lines, Inc.*, 398 U.S. 375, 401-402 (1970); *Southern Pacific Co. v. Jensen*, 244 U.S. 205, 215-16 (1917); *The LOTTAWANNA*, 88 U.S. (21 Wall.) 58 (1874). This Court has long held that the general maritime law is to be defined "free from inappropriate common-law concepts." *Kermarec v. Compagnie Generale Transatlantique*, 358 U.S. 625, 630 (1959). Indeed, the case law is uniform that state law may not be applied by a federal court to defeat any substantial admiralty right of recovery whether by federal statute or decisions of the federal courts. Nor can state law be applied to disrupt the harmony which admiralty law attempts to maintain. *St. Hilarie Moye v. Henderson*, 496

F.2d 973, 980 (8th Cir. 1974), citing *Pope &. Tablot, Inc. v. Hawn,* 346 U.S. 406 (1953); *Garrett v. Moore-McCormick Co., Inc.,* 317 U.S. 239 (1942) (additional citations omitted). Other circuits recognizing the fundamental requirement of uniform admiralty law include: *Floyd v. Lykes Bros. Steamship Co., Inc.,* 844 F.2d 1044, 1047 (3rd Cir. 1988); *Byrd v. Byrd,* 657 F.2d 615, 617 (4th Cir. 1981) (state law will not be applied where its adoption might impair the uniformity and simplicity of admiralty law); *J. Ray McDermott & Co., Inc. v. The Vessel Morning Star,* 457 F.2d 815, 818 (5th Cir. 1972).

This introduction of state law (especially outdated state law) displaces all admiralty precedent which imposes a much heavier burden on the party asserting this affirmative defense than the standard of care under the Alabama law relied on by the Court of Appeals in the case at bar. As such, the United States Court of Appeals for the Eleventh Circuit contradicts uniform admiralty law which may not be disturbed by resorting to state or common law.

CONCLUSION

For the foregoing important reasons and authorities, this Petition for Writ of Certiorari should be granted so that the limitations of Rule 52(a) on appellate review will be enforced and the conflict among the federal courts of appeal regarding admiralty law "Act of God" defenses created in this case by the Eleventh Circuit will be resolved by applying well established admiralty precedent to this maritime claim.

Respectfully submitted,

BROOX G. HOLMES*
DONALD C. RADCLIFF
ARMBRECHT, JACKSON,
DEMOUY, CROWE,
HOLMES & REEVES
Post Office Box 290
Mobile, Alabama 36601
(205) 432-6751

Counsel for Petitioner
Warrior & Gulf
Navigation Company

*Counsel of Record

No. 89– _____

In The

Supreme Court of the United States

October Term, 1989

Warrior & Gulf Navigation Company, et al.,
Petitioners

v.

United States of America,
Respondent.

APPENDIX TO PETITION FOR WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE ELEVENTH CIRCUIT

Broox G. Holmes*
Donald C. Radcliff
Armbrecht, Jackson, DeMouy,
Crowe, Holmes & Reeves
P.O. Box 290
Mobile, Alabama 36601
(205) 432-6751

Counsel for Petitioner
Warrior & Gulf Navigation Company

*Counsel of Record

TABLE OF CONTENTS

APPENDIX A PAGE

Opinion of the Court of Appeals for the Eleventh Circuit, dated February 6, 1989 .. A1

APPENDIX B

Order denying WGN's Petition for Rehearing dated April 25, 1989 ..... A14

APPENDIX C

Memorandum Opinion for the United States District Court for the Southern District of Alabama dated May 18, 1987 ..... A16

APPENDIX D

Record of Gate Openings at Holt Lock and Dam A53

APPENDIX A

No. 87-7442.

United States Court of Appeals,

ELEVENTH CIRCUIT.

Feb. 6, 1989.

WARRIOR & GULF NAVIGATION COMPANY,
Plaintiff-Appellee,

v.

UNITED STATES of America,
Defendant-Appellant.

WARRIOR & GULF NAVIGATION COMPANY, etc.,
Plaintiff,

HUNT OIL COMPANY, Insurance Company of North America,
Defendants-Appellees,

v.

UNITED STATES of America,
Defendant-Appellant.

PARKER TOWING COMPANY,
Plaintiff-Appellee, Cross-Appellant,

v.

WARRIOR & GULF NAVIGATION COMPANY,
Defendant,

UNITED STATES of America,
Plaintiff-Appellant, Cross-Appellee.

UNITED STATES of America,
Plaintiff-Appellant, Cross-Appellee,

v.

PARKER TOWING COMPANY,
Defendant-Appellee, Cross-Appellant.

SOUTHERN NATURAL GAS COMPANY,
Plaintiff-Appellee,

v.

WARRIOR & GULF NAVIGATION COMPANY, et al.,
Defendants,

UNITED STATES of America,
Defendant-Appellant.

Barge owners brought action against Government to recover for damages allegedly caused by Army Corps of Engineers' negligent operation of lock and dam system. The United States District Court for the Southern District of Alabama, Nos. 84-0632-T, 84-0672-T, 84-1341-T, 85-0574-T, and 85-0938-T, Daniel Holcombe Thomas, J., entered judgment in favor of owners, and Government appealed. The Court of Appeals, Smith, Circuit Judge, sitting by designation, held that evidence was sufficient to establish that unprecedented heavy rainfall, rather than lock operator's alleged violation of Army Corps of Engineers' requirements for operation of lock and dam system, was proximate cause of series of barge accidents.

Reversed and remanded.

1. Navigable Waters 26(3)

Evidence was sufficent to establish that unprecedented heavy rainfall, rather than lock operator's violation of Army Corps of Engineers' requirements for operation of lock and dam system, was proximate cause of series of barge accidents, precluding Government from being held liable for resulting damages; evidence indicated that lock and dam system was designed to maintain navigational depth in river and was not designed to accommodate flood waters or to alleviate

flooding. 28 U.S.C.A. § 1333; Suits in Admiralty Act, §§ 1-12, 46 U.S.C.A.App. §§ 741-752; 33 U.S.C.A. §§ 401 et seq., 702c et seq.

2. Navigable Waters 22(4)

Barge owner's negligence in failing to move barge after being warned that Army Corps of Engineers was going to lower lake in order to salvage another barge precluded owner from recovering from Government for damages to barge caused when lake was lowered.

Edward J. Vulevich, Jr., Mobile, Ala., Thomas L. Jones, Charles R. Gross, U.S. Dept. of Justice, Civ. Div., Washington, D.C., Robert S. Greenspan, J.B. Sessions, U.S. Atty., Mobile, Ala., for U.S.

G. Hamp Uzzelle, III, Hand, Arendall, Bedsole, Greaves & Johnston, Mobile, Ala., for Parker Towing Co.

James B. Newman, Coale, Helmsing, Lyons & Sims, Mobile, Ala., David L. Carroll, Rosen, Harwood, Cook & Sledge, P.A., Tuscaloosa, Ala., for Hunt Oil.

R. Boyd Miller, Cabaniss, Johnston, Gardner, Dumas & O'Neal, Mobile, Ala., for Sonat, Inc.

James P. Green, Brown, Hudgens, Richardson, P.C., Mobile, Ala., for Ins. Co. of No. America.

Donald C. Radcliff, Armbrecht, Jackson, DeMouy, Crowe, Holmes & Reeves, Broox G. Holmes, Mobile, Ala., for Warrior & Gulf.

Michael L. Minsker, Cozen & O'Connor, Philadelphia,

Pa., for Southern Natural Gas and Sonat.

Appeal from the United States District Court for the Southern District of Alabama.

Before RONEY, Chief Judge, JOHNSON and SMITH*, Circuit Judges.

SMITH, Circuit Judge:

In this maritime tort case,[1] the United States District Court for the Southern District of Alabama found that the actions of the United States (Government) on December 2-3, 1983, by and through the United States Army Corps of Engineers, were the proximate cause of the damages sustained by Warrior & Gulf Navigation Company, Parker Towing Company, Hunt Oil Company, and Southern Natural Gas Company (collectively referred to as appellees) on the Black Warrior River and, on that basis, that the Government is liable to the appellees as a matter of law.[2] We reverse and remand.

---

* Honorable Edward S. Smith, U.S. Circuit Judge for the Federal Circuit, sitting by designation.

[1] The jurisdiction of the district court was based on 28 U.S.C § 1333 (1982) and on the Suits in Admiralty Act, 46 U.S.C. §§ 741-752 (1982).

[2] *Warrior & Gulf Navigation Co. v. United States*, Civil Action Nos. 84-0632-T, 84-0672-T, 84-1341-T, 85-0574-T, 85-0983-T (S.D.Ala. May 18, 1987). This case was tried on liability only.

Issue

The principal issue on appeal is whether the district court clearly erred by finding that the Army Corps of Engineers' operation of the lock and dam facilities on the Black Warrior River on the night of December 2, 1983, and in the morning of December 3d, was the proximate cause of the damages incurred by appellees.

Background

A. *The Black Warrior River and Its Lock and Dam System*

The Black Warrior River flows in a southwesterly direction from an area generally north of Tuscaloosa and west of Birmingham to Demopolis, Alabama. At Demopolis, the Black Warrior River joins the Tombigbee River and subsequently flows south, joining with the Alabama River to form the Mobile River, which empties into Mobile Bay and eventually into the Gulf of Mexico.

In order to improve the navigability of the Black Warrior River, there exists a system of four lock and dam facilities constructed and operated by the Army Corps of Engineers.[3] Proceeding upstream from Demopolis, this system is comprised of the following facilities: the Warrior lock and dam located at river mile marker (RMM) 261, the William Bacon Oliver lock and dam at RMM 338 (located within the southern part of the city of Tuscaloosa), the Holt lock and dam at RMM 347, and the

---

[3] The Rivers and Harbors Act, 33 U.S.C. §§ 401 *et seq.* (1982), provides the Army Corps of Engineers with authority to construct and operate the facilities comprising the Black Warrior River lock and dam system.

John Hollis Bankhead lock and dam at RMM 365. The Highway 82 Bypass Bridge crosses the Black Warrior River in Oliver Lake at RMM 341.5, or 5.5 miles below the Holt facility and 3.5 miles upstream of the Oliver facility. This system of lock and dam facilities provides the Black Warrior River with a navigable channel that is 200 feet wide and 9 feet deep. The Black Warrior River lock and dam system is comprised of "run-of-the-river" facilities and not "flood control" facilities within the meaning of 33 U.S.C. § 702c *et seq.*

B. *The Unprecedented Rain*

As found by the district court, during the evening of December 2d and in the early morning of December 3, 1983, there was an "unprecedented rainfall" in the area of Birmingham and Tuscaloosa, Alabama. The district court cited testimony of a towboat captain, not employed by any of the parties to this proceeding, that it was raining so hard that, at one point during this period, the river was rising at the rate of approximately 1 foot every 5 minutes. In the area just below the Bankhead facility, 10.3 inches of rain fell during the 12-hour period from 7 p.m. on December 2d to 7 a.m. on December 3d.

C. *The Critical Events*

On the night of December 2d, three Warrior & Gulf Navigation Company (Warrior & Gulf) towboats, the MUSKOGEE, the APALACHEE, and the CADDO, were proceeding downstream from above the Holt facility to ultimate destinations south of the Oliver facility. At this same time, the Warrior & Gulf towboat, TAHOME, with two empty barges in tow, was proceeding upstream above the Oliver facility. The MUSKOGEE, the

APALACHEE, and the CADDO, each pushing a tow consisting of six loaded coal barges, arrived at the Holt facility between 10 p.m. and midnight on December 2d and all three proceeded through the lock. The CADDO was the third of the Warrior & Gulf towboats to proceed through the Holt lock. The district court found that the CADDO departed the lock prior to 1:50 a.m. and that the CADDO was locked through the Holt facility sometime between 12:58 a.m. and 1:50 a.m. At approximately 2:30 a.m., as the CADDO proceeded down the river from the Holt facility, she collided with the Highway 82 Bypass Bridge and her tow broke up. The CADDO put out a call for assistance over the VHF radio and the APALACHEE and the TAHOME, both of which were above the Oliver facility at that time, proceeded upstream to assist the MUSKOGEE in aiding the CADDO. The APALACHEE left her six loaded barges, the MUSKOGEE left her two loaded barges, and the TAHOME left her two empty barges moored to mooring cells above the Oliver facility. Four more of the MUSKOGEE's loaded barges were moored below the Oliver facility. Eventually, five of the CADDO's barges were retrieved, but one loaded barge sank.

While the three tugs were working to retrieve the CADDO's tow, the six loaded barges from the APALACHEE's tow and the two loaded barges from the MUSKOGEE's tow broke loose from their moorings above the Oliver facility and drifted downstream, going over the top of Oliver Dam, which was underwater at that time as a result of the rapidly rising river. These barges struck and broke loose the four loaded barges of the MUSKOGEE's tow located below the Oliver facility and also hit the tow of the THELMA PARKER. As a result of this collision, two empty Parker Towing Company

(Parker) barges, the PTC 216 and the PTC 235, were broken out of the tow and damaged.

The drifting Warrior & Gulf barges proceeded downstream, and one or more of them collided with and damaged the Hunt Oil Company (Hunt) dock and one or more also ruptured, severed, and separated the Southern Natural Gas Company (SoNat) submarine pipelines Nos. 1 and 4 located downstream of the Hunt dock at RMM 336.9.

Subsequently, the 12 loaded Warrior & Gulf barges all sank, but the 2 empty Parker barges which were broken loose and the 2 empty barges of the TAHOME, which had also broken loose, did not sink and were rescued. At some undetermined time, a Parker barge, the PTC 135, broke loose from her moorings at the Brookwood (Drummond) facility at RMM 354 and drifted into the spillway gates at Holt Dam at 6 a.m. on December 3d. The PTC 135 did not do any damage to the Holt Dam, but her presence prevented the closing of three spillway gates. On December 3d, Parker abandoned the PTC 135 to the United States.

Approximately 1 week after the PTC 135 drifted into the Holt Dam, the level of Holt Lake was substantially lowered by the Army Corps of Engineers in order to remove the PTC 135. As a result of the lowering of the lake, a Parker barge, the PTC 107, which was moored at Drummond, grounded on the bottom of the lake, fractured in the middle, and was a constructive total loss as a result thereof. The district court found that Parker knew the lake was being lowered to remove the PTC 135 but that Parker did not realize that the PTC 107 would be damaged.

D. *The District Court's Decision*

The district court determined that the damages claimed by the appellees all stemmed from the domino effect of the CADDO's tow colliding with the Highway 82 Bypass Bridge and the tow's resulting break-up. The district court concluded that the CADDO casualty was the sole responsibility of the United States. Had this casualty not occurred, the district court found, the various towboat captains in question would not have left their tows unattended. The district court reasoned that leaving their tows unattended under the circumstances that then existed was not negligence on the part of the captains.

In reaching its conclusion, the district court found that the Army Corps of Engineers erred in operating the Holt facility. The district court, relying in part on the Army Corps of Engineers' own records, found that the lock operator at the Holt facility violated the undisputed Army Corps of Engineers' requirements for the operation of the Black Warrior River lock and dam system. The district court determined that this wrongful operation was the proximate cause of the damage sustained by appellees.

For the reasons set forth below, we hold that the district court clearly erred by concluding that the actions of the United States were the proximate cause of the CADDO casualty and, thus, of all the damages suffered by Warrior & Gulf, Parker, Hunt, and SoNat. To the contrary, it was an act of God, in the form of unprecedented rainfall, that proximately caused the domino effect that led to the damages experienced by the parties in this case.

Analysis

A. *The Government's Appeal*

[1] Our review of the district court's finding on the issue of proximate cause is limited to determining whether that finding is clearly erroneous.[4] "A finding is 'clearly erroneous' when although there is evidence to support it, the reviewing court on the entire evidence is left with the definite and firm conviction that a mistake has been committed."[5]

The act of God principle "applies only to events in nature so extraordinary that the history of climatic variations and other conditions in the particular locality affords no reasonable warning of them."[6] A party may be deemed negligent yet still be exonerated from liability of the act of God would have produced the same damage irrespective of the party's negligence. In that case, the party's negligence would not be deemed the proximate cause of the injury.[7]

---

[4] *Fireman's Fund Ins. Co. v. M/V Vignes*, 794 F.2d 1552, 1555 (11th Cir.1986) (citing *Marcona Corp. v. Oil Screw Shifty III*, 615 F.2d 206, 208 (5th Cir.1980)).

[5] *United States v. United States Gypsum Co.*, 333 U.S. 364, 395, 68 S.Ct. 525, 541, 92 L.Ed. 746 (1948), *quoted in Anderson v. City of Bessemer*, 470 U.S. 564, 573, 105 S.Ct. 1504, 1511, 84 L.Ed. 2d 518 (1985).

[6] *Bradford v. Stanley*, 355 So.2d 328, 330 (Ala. 1978) (citing *Gulf Red Cedar Co. v. Walker*, 132 Ala. 553, 31 So. 374 (1902).

[7] *Glisson v. City of Mobile*, 505 So.2d 315, 319 (Ala.1987).

The record clearly establishes, and the district court found, that the excessive rain on the night of December 2d and in the morning of December 3, 1983, was unprecedented. In light of the weather conditions existing on the night of December 2d and in the morning of the 3d, we must conclude that the district court clearly erred by finding that the Army Corps of Engineers' operation of the lock and dam facilities on the Black Warrior River was the proximate cause of the damages sustained by the parties. The Black Warrior River lock and dam system is not a flood control project; rather, this system is comprised of run-of-the-river facilities. As such, the lock and dam facilities are not designed to accommodate flood waters or to alleviate flooding. The function of run-of-the-river dams simply is to pass downstream all inflow in excess of that necessary to provide the advertised navigational depth in each dam's upper pool. During the critical period, as more water moved down the river as a result of the unprecedented rain, more water was released by the dam, i.e., the flow out of the dam was matching the flow into the lake above the dam. After a thorough review of the record, we are left with the definite and firm conviction that the unprecedented rain, rather than the Army Corps of Engineers' operation of the Black Warrior River lock and dam system, was the inevitable cause of the chain of events in this case.

B. *Parker's Cross-Appeal*

[2] Parker contends it is entitled to recover from the United States that portion of the loss to the PTC 107 caused by the negligence of the United States in lowering Holt Lake, despite Parker's own contributory negligence. Parker contends that the district court erred by denying

Parker any recovery for the damage to the PTC 107 caused by the Army Corps of Engineers' negligence because of Parker's contributory negligence. This argument is without merit.

It is well established that comparative fault generally governs recovery in admiralty.[8] However, contrary to Parker's contentions, the district court did not conclude that the Government was contributorily negligent in lowering Holt Lake. Rather, as the district court found, there was advanced warning that Holt Lake was going to be drawn down to facilitate the salvage of the PTC 135.

In addition, Parker seeks remand of this case so that the district court may adjudicate Parker's claims against Warrior & Gulf for damage sustained by the PTC 216 and the PTC 235. Originally, Parker brought a claim against both the United States and Warrior & Gulf for this damage. The district court did not adjudicate Parker's claim against Warrior & Gulf, and, instead, determined that the Government was liable to Parker for this damage. In light of our decision on the liability of the United States, we remand this case for further proceedings on Parker's claim against Warrior & Gulf.[9]

Conclusion

In view of the foregoing, we hold that the district court clearly erred by determining that the actions of the United States were the proximate cause of the damages

---

[8] *See United States v. Reliable Transfer Co.*, 421 U.S. 397, 95 S.Ct. 1708, 44 L.Ed.2d 251 (1975).

[9] The district court's opinion states that "[a]ll parties, save the United States, have settled with Warrior & Gulf." This is not accurate. Parker has not settled its claim against Warrior & Gulf.

incurred by the appellants on the Warrior River on the night of December 2d and in the morning of December 3, 1983. Accordingly, on this issue, we reverse the district court's judgment. In light of our holding absolving the Government of liability, we remand this proceeding to the district court for further proceedings on Parker's claim against Warrior & Gulf for damages incurred to the PTC 216 and the PTC 235.[10]

REVERSED AND REMANDED.

---

[10] We note that, in the district court, the United States asserted a claim against Parker for salvage costs of the PTC 135. The district court denied that claim on grounds that the damage to the PTC 135 was proximately caused by the negligence of the Government. Although on appeal we reverse the district court's finding of proximate cause, we do not reach the Government's claim in light of the Government's choice not to pursue it on appeal.

APPENDIX B

No. 87-7442.

United States Court of Appeals,

FOR THE

ELEVENTH CIRCUIT.

WARRIOR & GULF NAVIGATION COMPANY, *et al.*,

Plaintiffs-Appellees,

v.

UNITED STATES of America,

Defendant-Appellant.

Appeal from the United States District Court for the Southern District of Alabama

ON PETITION(S) FOR REHEARING SUGGESTION(S) OF REHEARING

IN BANC

(Opinion February 6, 1989, 11 Cir., 198 ___ , _____ F.2d _____).

(April 25, 1989)

Before RONEY, Chief Judge, JOHNSON and SMITH*, Circuit Judges.

PER CURIAM:

(X) The Petition(s) for Rehearing are DENIED and no member of this panel nor other Judge in regular active service on the Court having requested that the Court be

---

*Honorable Edward S. Smith, U.S. Circuit Judge for the Federal Circuit, sitting by designation.

polled on rehearing in banc (Rule 35, Federal Rules of Appellate Procedure; Eleventh Circuit Rule 35-5), the Suggestion(s) of Rehearing In Banc are DENIED.

ENTERED FOR THE COURT:

/s/ PAUL H. RONEY
United States Circuit Judge

ORD-42

APPENDIX C

IN THE
United States District Court

FOR THE
SOUTHERN DISTRICT OF ALABAMA
SOUTHERN DIVISION

WARRIOR & GULF
NAVIGATION COMPANY, et al,
Plaintiffs,

v.

UNITED STATES
of America, et al,
Defendants.

CIVIL ACTION NOS.
84-0632-T, 84-0672-T,
84-1341-T, 85-0574-T,
and 85-0983-T.

FINDINGS OF FACT AND CONCLUSIONS OF LAW

1. These consolidated cases, which were tried before the court on the issue of liability only on September 15-19, 22-24, 1986, arise out of events occurring on the Black Warrior River near Tuscaloosa, Alabama, on the night of December 2, 1983, and the morning of December 3rd, when an unusually heavy rainstorm occurred.

2. As a result of the events involved herein, Warrior & Gulf Navigation Company (Warrior & Gulf) seeks to recover from the United States for the loss of 13 standard 195′ x 135′ open hopper river barges and their cargoes of

coal. Hunt Oil company (Hunt) seeks to recover from the United States for physical damages to its dock structure located at Mile 337 on the Black Warrior River, and Southern Natural Gas Company (Sonat) seeks to recover from the United States for damage to its underwater natural gas transmission pipe lines which were located just downstream from Hunt's dock. Hunt and Sonat had initially asserted claims against Warrior & Gulf also, but these claims have been settled. Parker Towing Company, Inc. (Parker) seeks to recover from the United States and also from Warrior & Gulf for damage to the PTC 216 and the PTC 235, two of its standard 195′ x 135′ open hopper river barges, which were part of a tow of empty barges which was pushed up into the east bank of the Black Warrior River just upstream of Hunt's dock on the night in question. Parker also seeks to recover from the United States alone for the loss of the barge PTC 135, another standard 195′ x 135′ open hopper river barge, and its cargo of coal, which barge has been moored at the Brookwood (Drummond) facility at Mile 354 and which had been broken free from its moorings and washed into Holt Dam at Mile 347, resulting in the loss of the barge and its cargo. Additionally, Parker seeks to recover for the constructive total loss of the PTC 107, another standard 195′ x 135′ open hopper river barge, which was severely damaged approximately a week later when the Holt Pool was substantially lowered, causing the loaded PTC 107 to break in the middle as she settled on the bottom. The United States seeks to recover from Parker Towing Company for the cost of removing the PTC 135 from the Holt Dam. Warrior & Gulf has filed a limitation of liability action but Parker is not a party to this action and Warrior & Gulf has not pleaded limitation of liability as a defense to Parker's complaint.

3. The Black Warrior River flows in a south southwesterly direction from an area generally north of Tuscaloosa and west of Birmingham to Demopolis, Alabama, where it joins with the Tombigbee River and subsequently flows south, joining with the Alabama River to form the Mobile River, which empties into Mobile Bay and eventually into the Gulf of Mexico. In order to improve the navigability of the Black Warrior River, there presently exists four locks and dams. Proceeding upstream from Demopolis, these are the Warrior Lock and Dam located at Mile 261, the William Bacon Oliver Lock and Dam at Mile 338 (located within the southern part of the town of Tuscaloosa), the Holt Lock and Dam at Mile 347, and John Hollis Bankhead Lock and Dam at Mile 365. Bankhead and Holt have gated spillways and Oliver has a fixed ungated spillway. The principal events of this litigation involve the operation primarily of the Bankhead and Holt Locks and Dams by the United States Corps of Engineers and to a lesser extent the Oliver Lock and Dam and the navigation of several Warrior & Gulf towboats and their tows on the night in question.

4. The Corps of Engineers, pursuant to authority granted in the River and Harbors Act, 33 U.S.C. § 401 *et seq.*, constructed and operates these locks and dams. These locks and dams provide a navigable channel in the Black Warrior River two hundred feet wide and nine feet deep.

5. BANKHEAD LOCK & DAM — Bankhead is a multi-purpose public work of the Corps of Engineers. It provides navigation, hydroelectric power and recreational functions. Bankhead is not a "flood control"

project within the meaning of 33 U.S.C. §702(c) *et seq.* Bankhead consists of three separate components, a lock, a dam and a reservoir.

(a) *Bankhead Lock* — The Lock at Bankhead is a single lift lock, 110 feet wide and 600 feet long. The lock is designed to raise a vessel moving upstream from 187.0 feet mean sea level (msl) in Holt Lake to 255.0 msl, the level of Lake Bankhead. The new Lock is located on the eastern side of the river downstream of the dam on an island, approximately one-half mile below Bankhead Dam. The office building, where the lock operators are normally housed, where river gauges and communication facilities are maintained and where all logs are recorded, is adjacent to the new lock.

(b) *Bankhead Dam* — The Dam across the Black Warrior River at Bankhead is topped by twenty-two spillway gates. These spillway gates are operated mechanically by pressing electrical buttons which raise the gates. The spillway gates are separated by large concrete piers. Spillway gates numbered 1 through 20 are 52 feet wide and 13.5 feet high. Spillway gates numbered 21 and 22 are 24 feet wide and 13.5 feet high. Alabama Power Company operates an electrical power generation facility on the western side of the dam. At normal pools, all twenty-two spillway gates are fully closed, with the only water passing downstream being that water released through the Alabama Power generator or through the operation of the lock. The bottom of the spillway gates (where they seal on the top of the Dam) are at 241.5 msl — 13.5 feet under the normal water level of 255.0 msl in Lake Bankhead. When fully closed, the top of a spillway gate (thus the top of the dam) is at 255.5 msl, six inches above the normal pool level in Lake Bankhead

of 255.0 msl. As each spillway gate is lifted, the top of the dam becomes higher. If all twenty-two spillway gates are lifted one foot, the top of the dam becomes 256.5 msl rather than 255.5 msl (the normal top) and there is a one foot opening 13.5 feet under water. By lifting these spillway gates, water passes under the spillway gates, over the spillway and into the lower pool — Holt Lake.

(c) *Bankhead Lake* — The upper level of the Black Warrior River at Bankhead Lock and Dam (referred to on occasion as the upper pool, Bankhead Reservoir or Lake Bankhead) is maintained at 255.0 msl. Bankhead Lake is approximately thirty-six miles long and has a capacity of 296,215 acre feet of water at a normal pool elevation of 255.0 msl. Upper tributaries of the Black Warrior River drain into Lake Bankhead, including Sipsey Fork. The Lewis Smith Dam (an Alabama Power Company project) is located on the Sipsey Fork, upstream of Bankhead. The waters of Lake Bankhead which flow through the gated spillway — the tail waters of Lake Bankhead — form the head waters of Holt Lake. Approximately 2,553,600 acres of land or 3,990 square miles surrounding this area drain rainwater into creeks and tributaries which form Lake Bankhead.

6. HOLT LOCK & DAM — Holt is multi-purpose public work of the Corps of Engineers. It provides navigation, hydroelectric power and recreational functions. Holt is not a "flood control" project within the meaning of 33 U.S.C. §702(c), *et seq.* Holt consists of three separate components, a lock, a dam, and a reservoir.

(a) *Holt Lock* — The lock at Holt is 110 feet wide and 600 feet long. The single lock at Holt serves to lift vessels from the lower pool elevation of 122.9 msl to the normal

upper pool (Holt Lake) elevation of 187.0 msl. The lock is on the eastern side of the river and it is immediately adjacent to the spillway dam. The office building where the lock tenders are normally housed and where all gauges, communication equipment and logs are located is situated adjacent to the lock on the eastern side of the river.

(b) *Holt Dam* — Holt Dam has fourteen spillway sections, each with its own tainter gate. The tainter gates at Holt are different than the spillway gates at Bankhead in that the tainter gates are partially curved and are raised by electrical motors which operate a steel super structure "arm" behind the tainter gates. The bottom of the tainter gates at Holt rest on top of the dam at an elevation of 152.5 msl or 34.5 feet under the surface at normal pool. The top of the tainter gates, when closed, are at elevation 187.5 msl. When Holt Lake is at its normal pool, 187.0 msl, no water is being passed through the spillway gates. At normal pool the only water which passes from Holt lake downstream to Oliver lake is that water which flows through the Alabama Power Company power house on the western bank of the river or through the Lock during normal locking operations. Each tainter gate at Holt is 40 feet wide and 35 feet high. As with Bankhead, when the gates are all raised, the top of the dam becomes higher.

(c) *Holt Lake* — Holt Lake starts at Holt Dam, Mile 347.0 and stretches upstream to Bankhead Lock and Dam at River Mile Marker 365.1. Holt Lake is approximately 18.1 miles long. Holt Lake has a capacity of 117,900 acre feet of water at a normal pool elevation of 187.0 msl. Holt Lake is only a little more than one-third the size of Lake Bankhead. Holt Lake receives all of the

water which passes through Bankhead Dam, but only approximately 242 square miles of land drain rain water directly into Holt Lake.

7. OLIVER LOCK AND DAM — Oliver provides navigation and recreation functions, but does not have a hydroelectric generator. Oliver is not a "flood control" project within the meaning of 33 U.S.C. § 702. Oliver also consists of three components, a dam, a lock and reservoir.

(a) *Oliver Lock* — The Lock at Oliver is an older model, being only 95 feet wide and 460 feet long. This single lift lock serves to lift upstream bound traffic from the normal lower pool elevation of 95.0 msl to the normal upper pool elevation of 122.9 msl. The lock at Oliver is located on the eastern bank of the river and is operated from an office located adjacent to the lock. In this office all communication equipment and logs are maintained.

(b) *Oliver Dam* — The dam at Oliver does not have spillway or tainter gates. That is, the dam is merely a concrete structure which runs across the river. The upper elevation of the dam is at 122.9 msl, the normal upper pool elevation for Oliver Lake. The normal tail water, or lower pool elevation at Oliver Dam is 95.0 msl. When the upper pool level exceeds 122.9 msl the water runs over the top of the dam. When the river level exceeds 132.9 msl (10 feet over the top of the dam) the marine vessels merely navigate over the top of the dam rather than through Oliver Lock.

(c) *Oliver Lake* — The dam and lock at Oliver are located at River Mile Marker 338.1, which is only nine miles downstream from Holt Lock and Dam. Accord-

ingly, Oliver Lake is very small, with a capacity of only 12,340 acre feet of water at a normal pool elevation of 122.9 msl. The river in Oliver Lake is much narrower than the river in Lakes Bankhead and Holt. Moreover, Lake Oliver is only about one-tenth the size of Holt Lake and one-twentieth the size of Bankhead.

8. Bankhead Lake contains 296,125 acre feet of water at normal pool. Holt Lake contains 117,990 acre feet of water at normal pool. Oliver Lake contains 12,340 acre feet of water at normal pool. Adding the size of the three lakes together, the total water volume behind the three dams equals 426,545 acre feet of water. Of this total, 69% of the water is impounded by Bankhead Dam, 28% of the water is impounded by Holt Dam and only 3% of the water is impounded by Oliver Dam. Based upon the size of the respective lakes, it is clear that the volume of water required to register a slight increase in the upper level of Lake Bankhead would produce a significant increase in Holt Lake and an even greater increase in the level of Oliver Lake.

9. When twenty-one spillway gates at Bankhead are opened two feet (gate log step 42), they discharge 40,340 cubic feet per second (cfs) of water. The spillway gates at Holt are narrower than those at Bankhead. For example, when the fourteen spillway gates at Holt are opened two feet at normal pool (Holt Gate Operating Schedule step 18), they are discharging 37,580 cfs of water. However, in that the spillway gates at Holt are much taller than those at Bankhead, they can discharge more water as they are lifted higher. For example, at Bankhead, on gate opening step 127 (all 22 gates opened full flow) the dam discharges 199,450 cfs of water. Down river at Holt, when all fourteen gates are opened to 20 feet (gate opening log

step 154) Holt dam is discharging 283,780 cfs, or nearly 95,000 cfs more water than Bankhead at full flow. (Appendix E, Chart 10, WGN Exhibit 7; and Appendix B, Chart 7, WGN Exhibit 11).

10. Based upon the respective sizes of the lakes and discharge capacity of the spillway gates, it is clear that significant openings of Holt spillway gates will more quickly and dramatically affect the water levels and river currents in Lake Oliver than similar gate openings at Bankhead affect Holt Lake.

11. The Route U.S. 82 bypass bridge crosses the Black Warrior River in Oliver Lake at approximately Mile Marker 341.5, or 5.0 miles below Holt Lock & Dam and 3.5 miles upstream of Oliver Lock & Dam.

The Weather

12. During the evening of December 2nd and the early morning of December 3, 1983, there was an unprecedented rainfall in the area of Birmingham and Tuscaloosa, Alabama. There was testimony by a tow boat captain, not employed by any of the parties to this litigation, that it was raining so hard that the river was rising at the rate of approximately one foot every five minutes at 2:10 A.M. The testimony further disclosed that in the area just below Bankhead Lock and Dam, 10.3 inches of rain fell during the 12 hour period from 7:00 P.M. on December 2nd to 7:00 A.M. on December 3rd.

River Traffic

13. On the night of December 2nd, three Warrior & Gulf towboats, the MUSKOGEE, the APALACHEE, and the

CADDO, were proceeding downstream from above Holt to ultimate destinations south of Oliver. Each was pushing a tow consisting of six loaded coal barges. While there is substantial dispute as to the precise time that these towboats and their barges proceeded through the lock at Holt, however, all three arrived at the lock between 10:00 P.M. and midnight on the 2nd and all three proceeded through the lock. The lock will allow the passage of a towboat and a six barge tow in a single lockage.

14. The lock at Oliver is a smaller lock which will allow only the towboat and four barges in a single lockage. Consequently, the MUSKOGEE, the first towboat through Holt, tied two of its barges at a location just upstream from Oliver Lock, and the MUSKOGEE then proceeded through Oliver Lock with four loaded barges and moored immediately south of the lock. The APALACHEE, the second towboat, proceeded toward Oliver and moored her six barges along with the two barges left by the MUSKOGEE. Meanwhile, Warrior & Gulf's towboat TAHOME was proceeding upstream with six empty barges and because of the four barge limit at Oliver, she moored four barges south of Oliver and proceeded through the Oliver lock with two empties which she moored just upstream of Holt. The MUSKOGEE was going to pick up the TAHOME's four empty barges and bring them through the lock to the TAHOME, and the APALACHEE and the MUSKOGEE would then take the eight moored loaded barges through Oliver southbound, and each towboat would make up its tow again and proceed on course.

15. The CADDO was the third of the Warrior & Gulf towboats to proceed through Holt Lock and there is a dispute in the evidence as to the time of her departure from Holt, ranging from approximately 1:45 A.M., according to her pilot, to approximately 2:03 A.M., according to Joe Mitchell, the lock tender at Holt. As she was proceeding down the river from Holt, she collided with the Highway 82 Bypass Bridge and her tow broke up. She put out a call for assistance over the VHF radio and the APALACHEE and the TAHOME, both of which were above Oliver at that time, proceeded upstream to assist, the APALACHEE leaving her six loaded barges and the MUSKOGEE's two loaded barges moored to the mooring cells and the TAHOME leaving her two empty barges also moored to cells above Oliver. Eventually, five of the CADDO's barges were retrieved, but one loaded barge sank.

16. While those three tugs were working to retrieve the CADDO's tow, the six loaded barges from the APALACHEE's tow and the two loaded barges from the MUSKOGEE's tow, which were above Oliver, broke loose from their moorings and drifted downstream, going over the top of Oliver Dam, which was underwater at that time as a result of the rapidly rising river. These barges struck and broke loose the four loaded barges of the MUSKOGEE's tow which was below Oliver and also hit the tow of the THELMA PARKER, which was pushed into the east bank of the river south of Oliver lock. As a result of this latest collision, two empty Parker barges PTC 216 and PTC 235 were broken out of the tow and severely damaged.

17. The drifting Warrior & Gulf Barges proceeded downstream, and one or more of them allided with and damaged the Hunt dock and one or more also ruptured the natural gas transmission lines of Sonat. Subsequently, the twelve loaded Warrior & Gulf barges all sank, but the two empty Parker barges which were broken loose and the two empty barges of the TAHOME, which had also been broken loose, did not sink but were rescued.

18. The PTC 135, which Parker Towing Company was operating on a long-term charter and which had been moored at the Brookwood (Drummond) facility at Mile 354, approximately seven miles upstream from Holt, broke loose from her moorings at some undetermined time and drifted into the spillway gates at Holt Dam at 6:00 A.M. on December 3rd. The PTC 135 had been tied up to a tow of six other loaded barges moored at Brookwood (Drummond) on November 25, 1983, and had not been moved thereafter until she broke loose on the morning of December 3rd. Brookwood (Drummond) is a normal and customary location for the mooring of loaded coal barges such as the PTC 135. The river between Holt and Bankhead is essentially a lake as a result of the dam at Holt, and thus strong currents are neither normal nor expected at that location. But this was not the case on the morning of December 3, 1983. Parker's towboat LADY NICA had departed Brookwood (Drummond) heading upstream with six empty barges on the early morning of December 3rd but, because of the extreme current against which she could make no headway, was forced to turn around at mile 363 at approximately 4:15 A.M. After she returned to Brookwood (Drummond), the LADY NICA and a Warrior & Gulf towboat caught and tied up approximately 13 or 14 barges belonging to Parker and to

Warrior & Gulf which had broken loose that morning. The current at Brookwood (Drummond) that morning was approximately 10 knots.

19. The PTC 135 did not do any damage to the Holt Dam, but her presence prevented the closing of three spillway gates, which had been opened to an elevation of 16 feet during the night.

20. On Saturday, December 3rd, Parker Towing Company abandoned its barge PTC 135 to the United States government in writing, which writing was acknowledged as received by the Corps of Engineers. The Corps subsequently hired a salvor to remove the barge, and the United States contends that Parker is strictly liable for the cost of such salvage. As a result of the incident, the cargo of the PTC 135, which Parker had insured and for which Parker's underwriter paid, was totally lost. Parker had also been required by its long-term charter of the PTC 135 to insure the barge, and its underwriter paid for the loss of the PTC 135.

21. Approximately one week after the PTC 135 drifted into Holt Dam, the level of Holt Lake was substantially lowered in order to remove the PTC 135. As a result of the lowering of the lake, Parker's barge PTC 107, which was moored at Brookwood (Drummond) grounded on the bottom and broke in the middle and was a constructive total loss as a result thereof. Parker knew that the lake was being lowered to remove the PTC 135 but did not realize that the PTC 107 would be damaged as a result of the lowering. Parker offered no evidence to justify its determination that the PTC 107 was not in any danger as a result of the lowering of the pool.

22. The Southern Natural Gas (SNG) submarine gas pipelines are located downstream of the Hunt Oil dock, approximately at River Mile Marker 336.9. (WGN Exhibit 5)

23. SNG river crossing gas pipeline number 1 was ruptured, severed and separated as a result of being struck by a free-floating or sunken barge. This pipeline had been built pursuant to a 1929 Corps Permit.

24. SNG river crossing pipeline number 4 was ruptured, severed and separated as a result of being struck by a free-floating or sunken barge. This pipeline had been built pursuant to a 1949 Corps Permit. Only this permit for Pipeline Number 4 had the clause "g" provision which the Corps asserts as exculpatory.

Hunt

25. The Hunt Oil Company (Hunt) dock facility is on the Black Warrior River, one mile downstream of the Oliver Lock & Dam (Oliver). It is on the Tuscaloosa side of the river which is the lefthand side of the river going downstream (sometimes referred to in the testimony as the east side of the river). There are mooring cells between Oliver and the Hunt dock facility, and there are mooring cells upstream of Oliver.

In the early morning of December 3, 1983, the southbound Warrior and Gulf Navigation Company (WGN) vessel MUSKOGEE tied two of its loaded barges to the mooring cells upstream of Oliver and locked downstream through Oliver with four loaded barges. The MUSKOGEE's log shows that it exited Oliver at 1:15

A.M. At about the same time the MUSKOGEE locked through going south, the WGN vessel TAHOME locked upstream through Oliver going north with two of its six empty barges. These two empty barges were tied up on the west or Northport side of the river above Oliver. Meanwhile, the WGN vessel APALACHEE was southbound, and it approached Oliver with six loaded barges.

Upon receiving a distress call from the CADDO, the APALACHEE tied its six loaded barges to the two loaded barges which had been left at the mooring cells upstream of Oliver by the MUSKOGEE. The APALACHEE and TAHOME then proceeded upriver to assist the CADDO.

At approximately 4:00 A.M. on December 3, 1983, the river conditions caused the eight barges which were tied up at the mooring cells above Oliver to break loose. These barges came over Oliver and hit the MUSKOGEE and its four barge tow causing those four barges to break loose. One of those four, AGT 94, hit and destroyed the Hunt dock facility. (The amount and type of damages resulting from this destruction are not at issue in this part of the hearing.)

26. Bankhead and Holt were described by the Corps at trial as "run-of-the-river" projects, as opposed to flood projects. When the crest gates are not closed during low water to maintain a minimum 9 foot channel depth, the crest gates are to be opened to allow the increased water flowing south to continue flowing downriver as if the project was not there. Run-of-the-river projects are not properly operated if the rising water is impounded above the dam then released suddenly, creating a faster rise in the river level and the velocity of current below the dam than if the project did not exist.

27. The importance of properly operating run-of-the-river projects to avoid a "damaging flood wave" is found in the Engineering and Design Regulation prepared by the Corps for guidance and use at such projects. EM 1110-2-3600, Reservoir Regulation Manual (Warrior & Gulf Ex. 15) states as follows:

> 4-05. OPERATION OF GATED SPILLWAYS a. General . . . . . .
>
> Until recent years it was common practice in the study of gated spillways to assume that the reservoir level would not be permitted to rise above the static-full-pool elevation. However, experience in the operation of gated spillways has shown that significant flood damages may arise because of the fact that reservoir releases under this plan of operation may be larger during floods occurring when the reservoir is full, or near full, than would have been the case under natural conditions before construction of the reservoir. The operation of gated spillways because of sudden increase in the rate of outflow may result in a damaging flood wave. For these reasons, insofar as practicable, reservoirs controlled by gated spillways should be designed and operated to accomplish the following objectives during periods when the reservoir is filled or nearly filled:
>
> (1) Peak rates of reservoir release during damaging floods should not exceed peak rates of the corresponding floods that would have occurred under runoff conditions prevailing before construction of the reservoir.

(2) The rate of increase in reservoir releases during a significant increment of time should be limited to values that would not constitute a major hazard to downstream interests.

28. Bankhead and Holt have detailed manuals and regulations promulgated by the Corps for use in the operation and maintenance of these projects. The Operation and Maintenance (O & M) Manuals for Bankhead and Holt both contain Forewords cautioning the lock personnel that failure to carefully operate and maintain the locks during normal and flood stages "can result in losses in property and possibly to human life and may have a harmful effect on the river traffic." The Forewords end by concluding that "[i]t is essential that maintenance and operation be provided in accordance with the manual(s) and the requisition prescribed by the Secretary of the Army." (WGN Ex. 6 & 10). Both Bankhead and Holt have specific written instructions governing the operation of the gated spillways across the Black Warrior, set forth in Appendices to the Reservoir Regulation Manual for the Black Warrior — Tombigbee River Basin. (Appendix E, Bankhead and Appendix B, Holt, WGN Ex. 7 & 11).

29. Relevant to this lawsuit, these operation manuals set forth the following instructions to the lock masters and lock tenders:

Bankhead O & M Manual
2-1.1 General

This portion of John Hollis Bankhead Dam

consists of a concrete dam, and 22 vertical lift gates, which are raised and lowered hydraulically to maintain an upper pool normal elevation of 255 feet. A 3-foot drawdown to 252 feet is permissible for power generation. During flood stage, the gates will be operated in accordance with the Black Warrior, Tombigbee River Basin Reservoir Regulation Manual Appendix E (Not a part of this manual).

Appendix E

4-6. *Operation of the spill way gates.* The spillway gates will be operated as directed by the Lockmaster in order to maintain the reservoir at or below elevation 255.0 except during floods with inflows in excess of discharge capacity. During floods the Lockmaster will maintain contact with the Reservoir Control and Meteorology Section for the exchange of hydrologic data which may be helpful in anticipating gate operating requirements. He will also keep informed of changes in power generating schedules which might require a change in spillway discharge.

4-7. When inflow and pool conditions require operation of the spillway, the gates will be opened in order and increments of openings shown on charts 9-13.[1]

---

[1] This gate operating schedule provides for the gates across Bankhead to be opened in sequence from Gate 1 through Gate 21; each one foot, then if needed, they are to be opened in the same sequence to 2 feet, then if further needed, to 4 feet, to 6 feet then to full flow. See Charts 9 through 13 Appendix E, Reservoir Regulation Manual Bankhead Reservoir, WGN Ex. 7. This schedule was not complied with during the time in question.

6-3. *Correlation with other projects.* Each of the Corps of Engineers' projects in the Black Warrior-Tombigbee River basin is a vital link in the navigation system of the basin. Bankhead Lock and Dam is located in the upper end of the Holt Reservoir and provides navigable depths to the upper end of the overall navigation project on Locust and Mulberry Forks. Bankhead Reservoir's function in the navigation system is accomplished by maintaining the pool level between the controlling elevations of 252.0 and 255.0, however, there is continuing communication between the Bankhead project, the Holt project and the Reservoir Control and Meteorology Section for the exchange of hydrologic data. This exchange of information aids in the operation of Holt Lock and Dam by providing an indication of expected inflows. The Alabama Power Company also coordinates its power generation at Bankhead and Holt Dams with power operations at its Smith Dam.

Holt Reservoir — Appendix B

17. *Normal regulation.* Limiting elevations for reservoir operation are a maximum of 187 and a minimum of 186, and the reservoir will normally be maintained between these levels. Because of navigation requirements, based on channel depths in the upper end of the reservoir, the pool must not be drawn down below elevation 186. The upper limit of 187 will not be exceeded, except during floods when inflows exceed the full discharge capacity of the project, unless otherwise directed by the Reservoir Regulation Section.

* * *

23. *Regulation during floods.* During floods the reservoir will be operated to keep it from exceeding elevation 187 by passing the inflow through the spillway gates and/or the power plant until the full discharge capacity of the spillway is reached. The gated spillway will discharge up to 393,000 cfs at elevation 187, and the proper manipulation of the gates will maintain the pool at that level for all inflows up to 393,000 cfs . . . Reservoir regulation procedures for floods occurring on various conditions of pool elevation are described in the following two paragraphs, and gate operating instructions are given in paragraphs 26 and 27. Any departures from this operation will be made only if and as directed by the Reservoir Regulation Section.

26. *Operation of spillway gates.* The spillway gates will be operated as directed by the Lockmaster in order to maintain the reservoir between elevations 186 and 187 except during floods with inflows in excess of spillway capacity. During floods the Lockmaster will maintain contact with both the Reservoir Regulation Section and Bankhead Lock and Dam for the exchange of hydrologic data which may be helpful in anticipating gate operating requirements . . .

27. When inflow and pool conditions require operation of the spillway, the gates will be opened in the order and increments of openings shown on

charts 7 through 11 . . . . . [2] Gate adjustments will be made as necessary and as specified by the above mentioned charts to maintain the pool between the limiting elevations, 186 and 187 . . . .

30. The lock operators testifying at trial were unfamiliar with these written requirements, never having seen either Appendix B or E, nor having been trained in accordance with these Corps mandates contained therein. The evidence reflected that the lock tenders had never experienced the Black Warrior rising at such a fast rate before and had never had to open the crest gates the height they were raised on December 3, 1983.

31. Once the upper pool reached 255 msl at Bankhead and 187 msl at Holt, the lock operator must immediately start the gate opening process and continue it until the upper pool stabilizes and returns to the normal elevation. This duty preempts any other job including operating the lock for river traffic. In determining whether the crest gates should be opened during a rising river, the lock tenders at Bankhead and Holt have an electronic gauge located inside the lockhouse and a staff gauge adjacent the upper lock chamber to monitor the exact stage of the river. The electronic gauge is supposed to register the elevation of the upper pool above sea level and the staff

---

[2] The Gate Operating schedule for Holt requires that the gates be opened in increments of one foot to two feet to three feet to four feet to five feet to six feet to eight feet to ten feet to twelve feet to sixteen feet to twenty feet to full flow. It was conceded by the Corps at trial that the gate opening methods at Holt on December 2-3, 1983, was not in compliance with this schedule. See Appendix B Reservoir Manual, Holt Reservoir Charts 7 through 11 - WGN Ex. 11.

gauge, which is a back-up in the event of a malfunction in the electronic gauge, reflects the actual elevation of the river.

32. The lock chambers at Holt and Bankhead are large enough to accommodate a tugboat pushing six standard size hopper barges. In fact, these locks are designed to accommodate a tugboat with eight barges. Oliver, the oldest of these three projects, only has a single lock which can hold only four barges. A tugboat pushing six or more barges has to "trip the barges" through Oliver Lock. This procedure entails leaving some of the barges at mooring cells built by the Corps for such use near Oliver, taking the remaining tow through the lock then leaving them at another set of mooring cells, returning through the lock to pick up those barges previously dropped off and, finally, locking back through Oliver for a third time, resuming the voyage after re-making the original tow.

33. While the lock tender at Oliver does not have crest gates to open during high water, he is required to dismantle and remove various equipment and machinery when high water is expected as that project becomes flooded when the river reaches a certain stage.

34. Bankhead, Holt and Oliver are all equipped with marine radios and a telephone system for communication with marine traffic, other lock and dam projects on the Black Warrior and the general public.

The Marine Traffic

35. Warrior & Gulf and Parker are two of the major marine users of the river system between Mobile and Port Birmingham above Bankhead. Both tugboat companies push empty coal barges from the Port of Mobile to

various coal loading facilities on the Black Warrior primarily located between Bankhead and Holt at Brookwood and return to Mobile with barges laden with coal. Warrior & Gulf has its principal place of business in Chickasaw, Alabama, immediately up river from Mobile, and Parker's principal place of business is on the Black Warrior just above Oliver.

36. The tugboat captains and pilots who testified at trial, stated that they depend on the lock tenders to broadcast all gate movements, particularly those in such increments as would have an adverse affect on the operation of the tugs and tows due to the increased current caused by the release of large volumes of water being discharged through the gated spillways at Bankhead and Holt.

37. This practice of warning tugs known to be on the river was confirmed by all the Corps employees who work at these projects and who testified about that policy at trial. Ed Varner, the area engineer in Tuscaloosa, testified that the lock operators on duty were required to advise the lower locks of their gate movements over the marine radio. This procedure serves two vital purposes. Using the marine radio ensures that the other lock operators are made aware of these gate movements. The river traffic is simultaneously alerted to these gate movements along with the other lock operators since the tugs continuously monitor channels 13 and 16. Varner explained that the obvious purpose of one project notifying the other is so that the lower project can anticipate a rise in the elevation of its upper pool and will know to expect the need to open more gates at the lower lock. The importance of notifying the marine traffic of these gate movements, as acknowledged by Varner, is so

that the tugboat operators can be made aware of this increased velocity in the river.

Bankhead

38. The rainfall distribution records at the Zeanah rain gauge (WGN Exhibit 26) located a couple of miles north of Bankhead reflected that the Bankhead area received almost two inches of rain from 7:00 p.m. until 10:00 p.m. on December 2, 1983, and over 3.5 inches prior to midnight. This rainfall resulted in the river system above Bankhead rising, causing local flooding north of Bankhead. By 10:00 p.m. on December 2, Bob Burnett, the lock tender on duty at Bankhead, had received complaints from residents living on the river north of Bankhead that they were being flooded. At that time, none of the crest gates had been raised. Burnett started opening his gates at 10:15 p.m. and when the shift changed at 11:00 p.m. Burnett told his relief, Maurice Lee, that they had a "runaway river", that Burnett had been opening gates since 10:15 and that additional gates would have to be opened. According to Lee, the upper pool continued to rise and was not brought under control until additional lock tenders were called in and all the gates at Bankhead were opened to full flow. Lee testified he had never seen the river rise at such a rapid rate as it did on December 3rd and he had never had to lift the crest gates out of the water before. He testified he could not remember whether he called Holt to alert them to Bankhead's gate movements, but said that Bankhead normally does call Holt before opening gates to keep them from receiving an unexpected rise in their pool.

39. The evidence was disputed as to whether or not the electronic gauge at Bankhead was working properly. The

staff gauge was illegible as its face was covered with algae. The lock tender was unaware of the rising river conditions until he started receiving complaints from residents living on the river north of Bankhead. By then the water above the dam had risen to the level where some water was beginning to flow over the top of the closed crest gates. Dr. Neil Grigg, a professor at Colorado State University in the Hydrology Department, conducted a detailed study of what occurred on December 2 and 3, 1983, and testified as an expert on behalf of Warrior & Gulf. Dr. Grigg procured various rainfall accumulation records from the United States Geological Service and National Weather Service. Based on his study of those and other records, Dr. Grigg testified that the lock tender at Bankhead had improperly allowed his upper pool to rise well above the 255 msl elevation without raising any of its gates. In his opinion, the lock tender at Bankhead should have began opening the crest gates as early as 7:00 p.m. and no later than 9:00 p.m., instead of allowing the water to be impounded then having to open the gates in larger increments over a shorter period of time than would have been necessary had the gates been opened gradually earlier in the evening.

Holt

40. The testimony of the Corps witnesses at trial was confusing and conflicting as to when Bankhead warned Holt that an unprecedented volume of water was on the way south from Bankhead. The third shift lock tender at Holt testified that Bankhead did not warn him of its actions until "it was almost too late" and the water had already hit him by surprise.

41. Regardless of whether or when Bankhead and Holt communicated with the other, the evidence was clear that neither lock attempted to alert the river traffic that as early as 11:00 p.m. on December 2nd, Bankhead was experiencing a runaway river such that it anticipated lifting all 22 of its crest gates completely out of the water. The call from Bankhead was over the telephone and not the marine radio, consequently it was not heard by any of the marine traffic on the river.

42. When gates are raised, a record of these gate openings, including the times in which they were opened, the increments raised, and the elevation of the upper pool and tailwater, is made by the lock tender on duty. A review of these records at Holt (WGN Exhibit 13) reveals crucial pieces of evidence.

43. First, the gate opening record at Holt proves that the operator violated the undisputed Corps requirement that the gates must be opened as soon as the upper pool exceeds the elevation of 187 msl and are to be raised continuously until the upper pool recedes below 187 msl. These records show that from 12:15 a.m. until 1:40 a.m. on December 3, 1983, a period of almost one and one-half hours, the operator did not raise any gates even though the upper pool rose above the 187 maximum between 10:40 and 11:40 p.m. on December 2, and continued to rise out of control until 6:15 a.m. The Corps' own records show that Holt was not operated as a run-of-the-river dam is supposed to be operated during this critical period of time. The operator devoted this time to locking three southbound Warrior & Gulf tugboats through Holt, ignoring the flood descending from Bankhead. After the last tugboat had been locked through Holt at approximately 1:40 a.m., the operator returned to the lockhouse

to discover that his upper pool had risen alarmingly, and immediately began opening the gates as fast as physically possible.

44. Second, the gate opening record at Holt shows that the gate openings from 1:40 to 2:20 a.m. dumped enough water into the river below Holt to raise the height of the river 10.2 feet in 40 minutes. This figure is obtained from the tailwater reading of 134.5 msl at 1:40 and of 144.7 msl at 2:20 on the gate opening record for Holt (WGN Exhibit 13). In this period of time, almost 100,000 cubic feet of water per second poured through the crest gates at Holt, doubling the volume of water being released downriver prior to 1:40 a.m.

45. Third, this record shows that from 1:40 a.m. until additional help arrived at Holt sometime after 2:30, Mitchell physically could not have performed any duties other than opening gates across the Holt Dam. From 1:40 to 2:00 a.m., Mitchell raised all 14 gates from six feet to ten feet requiring four trips across the dam activating the electric gate lifts 64 separate times over a 20 minute period. From 2:00 a.m. until 2:20, at least two more trips were made across the dam raising the gates another two feet. When the upper pool continued to rise and remain well above the maximum 187 msl level, Mitchell raised all 14 gates another four feet from 2:20 to 3:00 a.m. on December 3, 1983.

46. The times entered in the various logs on the morning of December 3rd between midnight and 3:00 a.m. are inaccurate. This was not purposely done by the lockkeeper, but much was happening at this period and he had more than one man could attend to. The lockkeeper's log shows that the CADDO entered the pit

for locking purposes at 12:58. The lockkeeper testified that at that time he warned the operator of the CADDO and that the CADDO should wait in the lock pit as he, the lockkeeper, was going to be opening gates, yet the log for the gate openings showed that the operation did not begin until 1:30. The lockkeeper's log shows that the CADDO departed from the lock at 2:03 a.m. This testimony conflicts with that of Mr. and Mrs. Addy, who testified that at 1:30 a.m. the water had risen so that the people in the Marina had become alarmed; that the Addy's drove down to Holt and were unable to find an attendant at the lock and dam; that at that time there was no boat in the lock. Mrs. Addy placed this time at 1:50 a.m. as she observed the clock on the wall at the barracks at Holt. This leads the Court to find that the CADDO departed the lock prior to 1:50 and that the CADDO was locked through Holt sometime between 12:58 and 1:50. The court finds that during the time from 12:58 to 1:50, the lockkeeper was busy locking vessels through and not raising gates. Captain Sanderson, who was at the wheel of the CADDO during the locking, placed the time of departure between 1:40 and 1:45. The CADDO struck the 82 Bridge at approximately 2:30. This was the time recorded by Captain Huckabee, the Captain of the THELMA PARKER. It is also according to the log of the APALACHEE.

Dr. Grigg performed certain calculations on the increase of the current or the velocity of the river caused by the discharge of water by Holt from 1:40 to 2:30 a.m. He conducted a distant study and concluded that the 10.2 foot rise in Holt's tailwater would have overtaken the CADDO at a point just above the 82 By-Pass Bridge. An analysis of Warrior & Gulf's Exhibit 13A, (which showed the gate openings at Holt and water elevations of the

upper and lower pools) shows that there were no gate openings between 0820 on November 30 and 0600 on December 2nd. And, that there was no appreciable change in the upper pool during that time. At 10:40 p.m. on December 2nd, 3 gates were raised one foot; at 11:40, there were 9 gates raised to one foot and 5 gates to two feet; at 12:15, 14 gates were raised to four feet and at 1:40, 14 gates were raised to six feet; at 2:00, 14 were raised to ten feet and at 2:20, 14 raised to twelve feet.

47. The release of water from 1:40 to 2:20 by Holt caught Oliver unprepared. The equipment at Oliver could not be dismantled and moved to a higher location before Oliver was flooded.

The Operations of the Marine Traffic

48. Several tugs were on the river as the flood wave flowed south. Two Parker tugboats, one Hollywood Marine tug and four Warrior & Gulf tugboats were all attempting to navigate between Bankhead and Tuscaloosa when the gates at Bankhead and Holt were raised completely out of the water. Three of the Warrior & Gulf tugs had completed their northbound leg of their voyages dropping empty barges at Brookwood and were taking six loaded barges in tow for the return trip to Mobile. The other Warrior & Gulf tug, the M/V TAHOME, was pushing empties northbound, headed to Brookwood.

M/V LADY NICA

49. The M/V LADY NICA pushing six empties northbound between Bankhead and Holt when the current suddenly increased to where the tugboat could make no forward progress, eventually having to turn

back south at Mile 363 at approximately 4:15 a.m. That tug then returned to the Drummond loading site at Brookwood where the M/V LADY NICA and a Warrior & Gulf tugboat spent the next several hours catching approximately 14 barges which were tied to the banks of the river as they broke loose and began to drift downriver toward Tuscaloosa. Apparently one Parker barge was not caught. That barge was washed downriver and eventually slammed into the Holt dam at 6:00 a.m. on December 3, 1983.

M/V MUSKOGEE

50. The M/V MUSKOGEE reached Holt from Brookwood at 10:45 p.m. on December 2, 1983. Capt. Floyd Carter testified that once he stopped the forward progress of his tug and tow just above Holt waiting on the lock tender there to open the upper miter gates of the lock, the flotilla remained in place with the gears in neutral. He described the river as calm with very little current. He was relieved by his pilot just before the MUSKOGEE locked through Holt, retiring to his bunk shortly after 11 p.m. According to the Holt traffic reports, the MUSKOGEE completed the southbound locking in approximately 30 minutes, a normal period of time. Capt. Carter was awakened shortly after 1:15 a.m when he felt a bump. He returned to the wheelhouse, being advised by his pilot that the MUSKOGEE had reached Oliver at 12:35 a.m. and was in the process of tripping the barges through the lock when the pilot misjudged the headway of the tug, bumping the mooring cells below Oliver while attempting to drop four of the MUSKOGEE's barges off at those cells to return above Oliver to trip the remaining two through that lock. Capt. Carter took over the wheel while his pilot assisted the deckhands in replacing a wire

which had broken when the barge bumped the mooring cells. According to Capt. Carter, the current had picked up some since he had gone off watch at Holt but the river was still navigable. Shortly after 2:30 a.m., the current below Oliver jumped tremendously so that Capt. Carter could hardly maintain his position in the river against the current.

M/V APALACHEE

51. According to the vessel logs of the M/V APALACHEE the APALACHEE and her tow of six barges entered the Holt lock at 12 midnight on December 2, departing Holt approximately 40 minutes thereafter. When the APALACHEE reached Oliver at 1:45, the river was beginning to rise. For that reason, the APALACHEE left her barges at the mooring cells above Oliver and travelled light boat to the Parker office where the pilot of the APALACHEE telephoned Bedford Slaughter, the port captain for Warrior & Gulf who died a few months later. Capt. Slaughter recommended that the Warrior & Gulf tugboats reduce their barges from six to four and instructed the APALACHEE to return two of her barges and two of the MUSKOGEE's barges above Holt where these barges could be left in a safe area. The APALACHEE returned to Oliver in order to push these four barges upriver and was communicating these instructions to the MUSKOGEE when the CADDO interrupted, saying that her barges had hit the Highway 82 By-Pass Bridge and broken apart. The CADDO pilot requested emergency assistance from anyone able to assist him. According to the APALACHEE's log, the CADDO hit the Highway 82 Bridge at 2:30 a.m. Both the APALACHEE and the TAHOME which had just locked through Oliver headed north, immediately went light boat to assist the CADDO. The TAHOME and

APALACHEE were successful in catching all but one of the CADDO's barges. That barge sank immediately upon hitting the highway bridge. When the rising river topped the mooring cells at Oliver the mooring lines securing six of the APALACHEE's barges and two of the MUSKOGEE's barges broke. These eight barges were then swept over Oliver and continued downriver until all ultimately sank.

M/V CADDO

52. The M/V CADDO arrived southbound at Holt at approximately 11:30 p.m. where she had to wait for both the MUSKOGEE and APALACHEE to lock. At that time, Eddie Sanderson relieved the captain, S.E. Kircharr, who retired to his bunk room. According to Capt. Kircharr, the river at Holt when he was relieved was calm with little or no current. Pilot Sanderson navigated the CADDO through the lock. According to him, the lock tender at Holt locked him through the project immediately after the MUSKOGEE and APALACHEE had completed locking through. Capt. Sanderson testified that the CADDO began locking around 1:15 and departed the lock southbound around 1:40 or 1:45. There was no delay during this lockage according to Capt. Sanderson and Joe Mitchell never advised him that he intended to open any crest gates nor did Mitchell suggest to him that he should remain in the lock. Capt. Sanderson testified at trial that he did notice a slight increase in the current after the CADDO left the lock but nothing unusual. However, as Capt. Sanderson was in his approach to navigate through the Highway 82 Bypass Bridge approximately six miles below Holt, he felt a sudden increase in current which caused his tow to be set into the pillar of the bridge. His barges then struck

an abutment of the bridge, causing them to break loose from the tug and from each other. He radioed for help, which he received from the APALACHEE and TAHOME.

M/V THELMA PARKER

53. Another Parker tow at mile 337 was also caught in the rapid deterioration of river conditions. Henry Huckabee was the pilot on the M/V THELMA PARKER, pushing six empties northbound. At 11:00 p.m. on December 2, 1983, Oliver had reported to the THELMA PARKER a lower gauge of 19 feet and when the THELMA PARKER arrived at Oliver at 2:30 a.m. on December 3, the gauge was between 24 and 28 feet. The THELMA PARKER remained just below Oliver throughout the remainder of the night. Capt. Huckabee stated that between 12 midnight and 2:30 the river was suitable for a six barge tow with a normal rise in the river, but after 2:30 the current became "uncontrollable" and the river was unsafe for any type of traffic.

M/V LANA LOUISE

54. The M/V LANA LOUISE, pushing an oil barge from New Orleans, arrived at the Hunt fuel dock at approximately 1:15 a.m. on December 3, 1983. At 2:10 a.m. the captain, Ernest LeBouef, was awakened by his pilot because the river was beginning to rise rapidly. Capt. LeBouef returned to the wheelhouse and, around 2:30 a.m., decided that it was too dangerous to attempt to load fuel at the dock. He then ordered the fuel hoses to be disconnected from his barge. Around 4:00 a.m., he was warned by Capt. Huckabee on the M/V THELMA PARKER, moored just north of the LANA LOUISE

between Hunt and Oliver, that some runaway barges had been washed over the Oliver dam and were headed in their direction. One of those barges struck the fuel dock, knocking it down. A short time later, two submerged Sonat gas pipelines exploded, shooting geisers of natural gas into the air.

CONCLUSIONS OF LAW

1. The court has jurisdiction of this cause pursuant to 28 U.S.C. § 1333 and to the Suits in Admiralty Act, 46 U.S.C. 741-752.

2. Exercising its jurisdiction over the subject matter, the Court concludes that the United States, acting by and through the Army Corps of Engineers, to be guilty of actionable negligence contributing to the damages complained of.

3. Having found that the United States breached its duty that it owed to the plaintiffs, and that this breach contributed to the casualty and the resulting property damage, it follows that it is liable to the plaintiffs as a matter of law on the merit.

4. The Government contends that its waiver of sovereign immunity does not extend to discretionary functions. *Williams v. U.S.*, 747 F.2d 700 (11th Cir. 1984). While this is a correct statement of law, it has no application in this case. The discretion exercised by the Government in this situation was the construction of the locks and dams in question. It exercised this discretion by deciding to build them, which it did. But, this accomplishment did not excuse negligent operation. There is no merit to the Government's contention that the acts of negligence found in this case were discretionary functions.

5.The Government also contends that Clause No. g. in the permits issued to Hunt and Sonat affords protection from liability. Clause No. g. provides that the United States shall in no case be liable for any damage or injury to the structure or work wherein authorized, which may be caused by or result from future operations undertaken by the Government for the conservation or improvement of navigation or other purposes and no claim or right to conservation shall accrue from such damage. I disagree. The damage sustained by Hunt and Sonat was not a "result from future operations undertaken by the Government for the conservation or improvement of navigation or other purposes." The Government cites a number of cases, each of which involves future work by the Government for the conservation or improvement of navigation and are certainly distinguishable from the facts in this case.

6. The damages claimed by the various plaintiffs all stem from the domino effect of the CADDO's tow colliding with the 82 Bypass Bridge and its break-up. Had this casualty not occurred, the various tow boats in question would not have left their tows unattended. Leaving their tows unattended under the circumstances that then existed was not negligence on the part of the captains. Whether or not the result would have been the same if they had remained with their tows, is of no import in this case. All parties, save the United States, have settled with WGN.

7. Having found that the CADDO casualty was the sole responsibility of the United States Government and not due to negligent navigation by its skipper, I do not reach the question of exoneration of limitation of liability by WGN under 46 U.S.C. 181.

8. This leaves the problem of Barge PTC 135 and the cost incurred in its removal from the spillway gates at Holt. It is true that the spillway gates at Holt are a "work" within the meaning of 33 U.S.C. 408 and that strict liability applies to both *in personam* and *in rem* defendants who impair the usefulness of such structures. The Court finds, however, that the negligence of the United States in the operation of the spillway gates proximately caused the breakaway of the PTC 135. Parker is therefore entitled to recover in full for its damages incurred in connection with the loss of the PTC 135 and its cargo.

9. This leaves the question of the loss of the PTC 107. The Court finds that while the damage to the PTC 107 was caused by the difference in the elevation of the pool, it also finds that Parker knew or should have known of this condition and its negligence contributed to this loss in the same, or to a larger degree, than that of the Government. Parker is not entitled to recover any damages for this casualty.

10. Since the court has found no negligence on the part of Parker in the PTC 135 casualty, and that the sole cause was that of the Government, the United States is not entitled to a mandatory monetary penalty. 33 U.S.C. 411 and 412.

11. The United States seeks exoneration on the premises that the losses suffered by the plaintiffs were the result of an Act of God for which the Government is not responsible. An Act of God is defined in 1 C.J.S., page 1423, as follows: "The most comprehensive definition of the term is any accident, due directly and exclusively to natural cause without human intervention, which by no amount of foresight, pains, or care, reasonably to have

been expected, could have been prevented." The Court having found human error in the operation of the gates, the Government has not sustained its burden of proof entitling it to exoneration on this theory.

This case was tried on liability only. The litigants have sixty (60) days from this date in which to agree on damages. Failing this, it will be set down for trial on damages immediately.

DONE this the 18th day of May 1987.

/s/ Daniel H. Thomas
United States District Judge

RECORD OF GATE OPENINGS AT LOCK AND DAM Holt ON Black Warrior RIVER

DATE: Beginning 12/1/83 Ending _____

DATE	TIME	STAGE		GATE OPENING																						MISC. GAGE READING
		POOL	TW	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
12/1	0600	186.5	124.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
12/2	0600	186.6	124.1	"	"	"	"	"	"	"	"	"	"	"	"	"	"									
	2240	187.0	126.3	"	"	1	"	"	"	"	"	"	"	"	"	1	1									
	2340	187.4	126.9	1	1	2	2	2	1	1	1	1	1	1	1	2	2									
12/3	0015	187.2	129.0	4	4	4	4	4	4	4	4	4	4	4	4	4	4									
	0140	187.4	134.5	6	6	6	6	6	6	6	6	6	6	6	6	6	6									
	0200	187.9	141.9	10	10	10	10	10	10	10	10	10	10	10	10	10	10									
	0220	188.5	144.7	12	12	12	12	12	12	12	12	12	12	12	12	12	12									
	0300	188.9	145.1	16	16	16	16	"	"	"	"	"	"	"	"	"	"									
	0340	189.7	148.3	"	"	"	"	16	16	16	16	16	"	"	"	"	"									
	0430	189.2	152.0	20	20	20	20	"	"	"	"	"	16	16	16	16	16									
	0615	187.3	157.2	"	"	16	16	"	"	"	"	"	"	"	"	"	"									
	0830	187.0	156.3	16	16	"	"	"	"	"	"	"	"	"	"	"	12									
	0900	186.9	156.1	"	"	"	"	"	"	12	12	12	"	"	"	"	"									
	0940	186.9	156.1	"	"	"	12	12	12	"	"	"	"	"	"	"	"									
	1025	186.9	155.1	20	20	12	"	"	"	"	"	"	"	"	"	"	1									
	1050	186.8	153.8	"	"	10	10	10	10	8	8	8	"	"	"	"	0									
	1120	186.7	153.4	"	"	8	8	8	8	6	6	6	"	"	"	"	"									

REMARKS: Crest gates 1-4 moved, Ros tied up on out side guide wall 12/3/83 at 0430. LOCKMASTER: _____
Unusual crest gate movements due to barge sinking under 11, 12, 13, crest gates 12/3/83 at 0600.

MOB FORM 36 JUL 63

This edition replaces MOB Form 36, Nov. 62 and MOB Form 494 which are obsolete